

APPENDIX 1

CERTIFICATION NO. 46 ACADEMIC YEAR 2005-2006

I, Carmen I. Raffucci, Secretary of the Academic Senate, University of Puerto Rico, Río Piedras Campus, certify that:

At the extraordinary meetings held on December 6, 2005, and January 26, 2006, the **Report of the Deans and Directors of the Schools on the Proposal for an Undergraduate Curriculum Review at the Río Piedras Campus** was considered, as stipulated in subsection 5 of Certification No. 11, Year 2003-2004, and in Certification No. 3, Year 2004-2005, of the Academic Senate.

After the appropriate analysis, the Academic Senate approved the **Proposal for an Undergraduate Curriculum Review at the Río Piedras Campus**, as amended, which is included as part of this Certification.

And in witness thereof, I issue this Certification under the seal of the University of Puerto Rico, Río Piedras Campus, on the 26th day of the month of January of the year two thousand six.

[signed]
Carmen I. Raffucci
Secretary of the Senate

[seal of the University of Puerto Rico, Río Piedras Campus]

rema
Attachment

I hereby certify as correct:
[signed]
Gladys Escalona de Motta, Ph.D.
Chancellor

UNDERGRADUATE CURRICULUM REVIEW AT THE RÍO PIEDRAS CAMPUS

On September 9, 2003, the Academic Senate approved a resolution deciding, among other matters, to return the discussion of the curricular review to the faculties, schools and various university sectors so that, within the period of a year, they would submit their recommendations to the Academic Senate. See Certifications No. 11 (2003-2004) and No 3 (2004-2005). It urged the faculties to develop interfaculty dialogues on the matter.

In the resolution, the Senate urged that the recommendations make reference to, among other things, the following core issues: (a) the profile of the institution's graduates; (b) the general characteristics of any curricular scheme that may be adopted by the Campus; and (c) characteristics of the general education component. It entrusted faculty deans and school directors, in consultation with their faculties and other university sectors, the task of generating a consensus document on the curricular review that would include the recommendations from the faculties and schools and the results of interfaculty talks. The faculties and schools then discussed in different ways the curriculum review.

The group of faculty deans and school directors advised of the need for the discussions within their faculties to take as their basis common points of departure that would orient the analysis of the undergraduate curriculum review. The group produced a base document that was sent to the faculties and schools as a working tool to orient and facilitate the discussions on curricular review, so as to comply with the Senate's assignment.

This working document incorporated many suggestions, concerns, proposals and points of view generated in talks within several curriculum committees, in internal discussions, in faculty and school assemblies, and in some dialogues initiated between faculties and schools. The document also benefited from the faculty deans and school directors awareness of the status of the discussions, concerns, diverse perspectives and proposals under discussion in their respective faculties and schools.

The document was circulated in the faculties and schools, where it was discussed and recommendations formulated. The group of deans and directors analyzed the recommendations and incorporated many of them. This document is the product of that effort. It constitutes a definitive proposal for approval by the Academic Senate.

The group of faculty deans and school directors concur that the numerous conversations held for the purpose of producing this document have been very fruitful. The discussions have allowed them to identify critical areas of the curricular review and to move forward towards a consensus on possible ways to address them. Above all, they have created the space for reflection necessary to better understand the needs and concerns of the Campus's diverse academic units, and have generated the spirit of dialog and academic discussion so essential for reaching the agreements needed to set the curriculum review on the right track.

The deans and directors propose that the Campus Academic Senate approve this document that contains the general points and minimum parameters the faculties and schools must observe in the design of their respective curricula. These points and parameters include: guiding principles for the undergraduate curriculum review, undergraduate program's vision, characteristics of the student admitted, profile of the Campus baccalaureate graduate, definition of general education, basic components of the undergraduate program, and other elements considered necessary to produce the comprehensive academic experience desired at this stage of our students' studies. Once it is approved by the Academic Senate, the faculties will present to the Senate their proposals for the review of their undergraduate programs, incorporating the outline established in this document.

I. GUIDING PRINCIPLES FOR THE UNDERGRADUATE CURRICULUM REVIEW

1. The curricular review process must be viewed as the search for a new balance of continuity and change, which allows areas of knowledge and disciplines to undergo the transformations necessary to their development without breaking with institutional structures and practices that have been valid and successful for decades.
2. The undergraduate program is something more than a sequence of courses. It is a comprehensive experience entailing numerous factors. The critical aspects that determine the undergraduate academic experience are, among others: the curriculum and course offerings, the quality of teaching, co-curricular activities or experiences, the physical context of daily coexistence, teaching and learning strategies, available resources for the support of research and creation, professional and academic counseling services, the availability of information resources, and access to international exchange.
3. Curricular review must be accompanied by a revision of resource allocation and of the assignment and use of the institution's infrastructure, without eliminating existing teaching positions.
4. Co-curricular activity or experience is of strategic importance in achieving the academic experience desired in the undergraduate program. This component must respond to the academic objectives arising from the graduate profile, and must be strictly coordinated with the faculty programs.
5. An appropriate budget must be created to finance a rich and varied offering of activities for students.
6. Every undergraduate program proposal must begin with a clear vision of the experience desired, and set forth a graduate profile that is as clearly defined as possible. The basic question in the curricular review must be: What type of education do we want our baccalaureate graduates to obtain in the context of a Campus committed to the strengthening of graduate studies and research as well as to our country, its economy, its socio-cultural development and its fundamental needs and aspirations?

7. The undergraduate curriculum must include: (a) a general education component; (b) solid education in the substantial aspects of at least one specific field of study; and (c) an electives component. The undergraduate program must incorporate complementary educational experiences. These components must be present throughout the undergraduate experience. There must be enough flexibility to allow each faculty and school to structure the way those elements are organized within the minimum parameters and interfaculty collaborative processes included in this document.

8. Upon developing or reviewing curricular schemes, faculties must ensure that the elements of the Graduate Profile are considered, incorporating them in academic courses and experiences of the undergraduate program components. This is an essential point in establishing the parameters for the evaluation of student learning at the Campus level.

9. The review must promote a higher degree of flexibility that provides options for students in configuring their programs of study, with the support of systematic and ongoing academic counseling.

10. This undergraduate scheme must be seen as a reference for ongoing reflection and revision of undergraduate degree programs. As such, it must serve the purposes of change in the faculties and schools within the framework of their autonomy and their special characteristics.

11. Special attention must be given to competencies in thinking, linguistics, communication, logical mathematical and/or quantitative reasoning, and to skills in the handling and use of information technologies. The development of these competencies must be the responsibility of all academic components of the Campus. Also, the opportunities for the development of these competencies must be offered from the first semester of the first year and continue to the end of the course of study, with well structured, demanding experiences.

12. A mechanism must be established to tend to students who demonstrate low levels of performance or academic difficulties in the first year of studies as well as throughout the undergraduate experience.

13. Research and creation must be incorporated throughout the undergraduate program as an integral part of the student's academic experience. Each faculty and school will structure the research and creation experiences they deem appropriate for their students. They must also familiarize them with the technology needed to access information available in bibliographic and document repositories, cyber-space and databases.

14. The undergraduate program must offer opportunities for exposure to international experiences. Each faculty and school will design offerings that facilitate a variety of experiences of an international nature.

II. UNDERGRADUATE PROGRAM VISION

An undergraduate program of the University of Puerto Rico, Río Piedras Campus, is a comprehensive educational experience that prepares the student to function as an educated and responsible citizen. It fosters in students the knowledge of culture and appreciation for diverse cultural manifestations and legacies, as well as the interest and abilities necessary to undertake graduate or professional studies, excel as professionals and incorporate lifelong learning. The undergraduate program is offered in the context of a university environment rich in academic, co-curricular, international, research, creation and diverse service experiences relevant to the profile and special features of the student body.

III. CHARACTERISTICS OF STUDENTS ADMITTED

The Río Piedras Campus admits students from the country's public and private schools who have graduated with top academic grades, as well as a lesser number of qualified students from other parts of the world. The data demonstrate that students admitted to the Río Piedras Campus have the following characteristics: close to half are from public schools; they have the highest grade-point averages and the highest scores in the university's admission exams; they are primarily females; they are between the ages of 17 and 19 when they begin their studies; they need economic assistance to pursue their university careers; and they come primarily from the greater metropolitan area, although students are admitted from all over the island.

The goal is to maintain standards of excellence for university admission in Puerto Rico, to recruit students interested in and capable of continuing to graduate studies, to increase the number of international students; and to achieve maximum student retention and optimum academic performance in the fulfillment of their course of studies.

The Río Piedras Campus will make efforts to facilitate the entry of non-traditional students through a diversity of methods, programs and services.

IV. PROFILE OF THE BACCALAUREATE GRADUATE

The profile of the baccalaureate graduate is framed within the mission of the Río Piedras Campus. The mission of this Campus is to promote the comprehensive education of its students through programs of study that foster intellectual curiosity, critical ability, ongoing learning, effective communication, appreciation and cultivation of ethical and esthetic values, and participation in Campus processes, as well as reflection and social responsibility. The mission also calls for the provision of an undergraduate education of excellence that promotes an integral vision of knowledge. It must also harmonize general education and specialized education and develop the ability to pursue independent study and research.

The graduate profile encompasses the characteristics it is hoped that students will exhibit at the end of their undergraduate experiences. It also establishes the institution's commitment to the comprehensive education of the undergraduate student.

The eleven characteristics listed in the profile are a guide for the design of curricular content, course sequence, learning experiences and services, their physical context and the allocation of resources for their achievement. They provide the framework required for the development of the Student Evaluation Plan that will serve as a mechanism to determine the student's learning achievement during his years of study.

The Profile

The person who graduates with a bachelor's degree from the Río Piedras Campus:

1. Will have developed the ability for reflective and critical thinking that fosters social, cultural, environmental and civic responsibility, and the ability to incorporate lifelong learning.
2. Will be able to communicate effectively, orally or in writing, in Spanish, in English as a second language, and to the extent possible, in a third language; and will have acquired knowledge of the literary and cultural legacies of these tongues.
3. Will understand the processes of knowledge creation in diverse fields of knowledge and the connections between them.
4. Will have developed esthetic sensitivities through the arts and literature; an understanding of human processes in time and space; comprehension of the concepts and methodologies of the natural, social and humanistic sciences; the ability for logical mathematical and/or quantitative reasoning and an awareness of his or her overall health and wellness.
5. Will have knowledge of the impact of human actions on the environment, and will demonstrate an ethic of respect for the environment.
6. Will have acquired substantial knowledge and competencies in at least one field of study or discipline.
7. Will have acquired the knowledge and competencies necessary for research and creation.
8. Will have developed a critical comprehension of diverse ways of thinking and norms of practice, including ethical, moral, legal and religious considerations.
9. Will understand and will be able to evaluate and function within Puerto Rican reality as well as within Caribbean, hemisphere and world cultural diversity and processes. This will allow him/her to contribute effectively to the enhancement of the quality of life

within Puerto Rican society and to develop concern and social responsibility for events at the Caribbean, hemisphere and world levels.

10. Will have developed the competencies necessary for the search, effective management and ethical use of information, as well as for the use of technology as a tool for the creation, management and application of knowledge.

11. Will have developed competencies for teamwork, decision making, problem solving and development of creativity and imagination.

V. THE CONCEPT OF GENERAL EDUCATION: FOUNDATIONS AND PROCESSES OF KNOWLEDGE

The Río Piedras Campus adopts the following concept of general education as a component of its undergraduate program:

General education is a field of coordinated academic experiences and practices constituted by the interweaving of multi- and interdisciplinary approaches, drawn from broad areas of knowledge and the complexity of emerging fields and disciplines. Its distinctive character is that it is designed to examine the foundations and processes of knowledge production itself in the context of the student's comprehensive education as an individual within a historical and cultural context. Therefore, what defines this academic component is its integrating and formative orientation in dealing with the fabric of relationships that constitute the knowledge process in its different forms.

General education conceives knowledge as continuous gestation, which implies renovation, search, problematization, reflective pondering, conceptual formulation, research, creation and communication. Its pedagogical orientation is the promotion of an experience that accents the formative process of cognitive content, of reflective, creative and critical abilities and sensitivities. Two central axes articulate general education: the exposition of the open, ever-changing nature of world views and integration as a basic principle of knowledge. General education is fully integrated with a student's overall experience throughout the undergraduate program.

VI. COMPONENTS OF THE UNDERGRADUATE PROGRAM

The three curricular components of the undergraduate program are: (a) a general education component, as defined in this document; (b) a major or specialty component; and (c) an electives component. These components are complemented with international experiences and co-curricular activities that include a broad offering of cultural, recreational and sports events. In both their structure and content, the three curricular components and the complementary experiences must contribute to the achievement of the graduate profile adopted by the Campus.

The undergraduate program components must not be seen as independent undertakings, but as inter-related tasks throughout the undergraduate program that bring about an all-encompassing educational experience in which faculties, schools and the students themselves actively participate. These components must be articulated so as to promote interfaculty experiences that allow the creation of new opportunities for academic projects, experiences and courses that bring together students and professors from different faculties and disciplines.

The proposed structure allows proportions of the components to vary in a student's program of study from semester to semester throughout the undergraduate program, encouraging the beginning of courses in the major from the first year. Complementary and co-curricular activities will accompany the students' academic experience to enrich their education and afford varied options to broaden their knowledge in combination with other fields of learning. In that sense, the undergraduate program must foster continuous and profound dialog among its various constituents so that students will be able to develop a broad culture that allows them to find their place in the contemporary world, not only to practice a profession, but also to participate actively in social and community matters.

Minimum Requirements for Each Component

General Education Component: 42 credits

Following is a breakdown of the minimum number of courses required in all of the Río Piedras Campus undergraduate programs. Depending on their curricular review processes, the programs may determine if additional general education courses are required.

Spanish	6 credits
English	6 credits
Literature (in Spanish, English, another language or comparative literature)	6 credits
Logical Mathematical Thinking or Quantitative Analysis	3 credits
Natural Sciences	6 credits
Social Sciences	6 credits
Humanities	6 credits
Arts	3 credits
Total	42 credits

Of the total of 42 minimum credits, the General Studies Faculty will handle the Spanish, English, natural sciences, social sciences and humanities courses (30 credits).

Faculties and schools must coordinate with the General Studies Faculty to ascertain the levels of Spanish and English that their students and programs need. They will have the

authority to set the levels of competency and complexity of these courses as well as additional credit requirements. The General Studies and Humanities Faculties will coordinate the English and Spanish offerings for students with high achievement levels.

Faculties and schools must coordinate with the Natural Sciences Faculty to ascertain the type of logical-mathematical thinking and/or quantitative analysis course and the number of credits that each program will finally determine to comply with this requirement. To complete this requirement, the programs may use logical-mathematical or quantitative analysis courses offered by other faculties.

The general education credits, which the General Studies Faculty will offer, will be selected from a variety of courses that will be designed for the General Studies Faculty after the appropriate interfaculty dialogs are established. The variety of offerings will achieve the objective of furthering academic and professional exchange and enrichment among faculties, as well as among the teachers of other faculties. Courses to be designed may include offerings of seminars, research or synthesis courses with diverse subject matter.

The six Literature credits and the three Arts credits will be offered in the Humanities and General Studies Faculties, in coordination between both faculties. The School of Architecture may also contribute to the Arts offering.

(Free) Elective Course Component: 18 credits

Elective courses can be taken in any faculty, except in the case of programs that for reasons of professional accreditation require fewer elective courses or electives in the area of the major, in which case there will be a minimum of 9 free credits.

Major or Specialty Component: 60 credits

(includes the Faculty's requirements)

Minimum total of credits: 120 credits

In the configuration of programs reviewed on the basis of this outline, faculties may increase the number of credits in any component of the undergraduate degree program up to a maximum total of 130, except when professional accreditation requirements justify an excess.

VII. OTHER PROVISIONS

With the objective of fostering the coordination of interfaculty general education courses in the areas of literature, the arts and logical-mathematical and/or quantitative reasoning, the registration of courses with double or multiple coding will be facilitated. To that end, criteria and administrative mechanisms for joint teaching appointments will be made flexible.

The General Studies Faculty will create a Summer Institute to offer propaedeutic courses, in support of the admissions process, in Spanish, English, mathematics and other competencies in collaboration with all of the Campus faculties.

The Center for the Development of Linguistic Competencies of the General Studies Faculty, in collaboration with the Humanities and Business Administration Faculties, must convert into a unit that serves all faculties, receiving the necessary resources that this entails.

Recognizing that the participation of the academic community is necessary and in accordance with the best university traditions, a Steering Committee will be created at the Campus level, composed as follows: faculty deans and directors of schools with undergraduate programs, the Dean of Administration and the Dean of Academic Affairs, three (3) faculty senators and three (3) students. The numerical ratio of teachers to students will be maintained. The Dean of Students will be a permanent guest.

Academic Units

In addition, the Steering Committee will create a committee to attend to matters of implementation in each academic unit, composed as follows: the dean of the faculty or a representative of the unit, teaching staff and students. The numerical ratio of teachers to students will be maintained.

Other Committees Mentioned

In regards to any other committees that may be created in relation to the implementation, the numerical ratio of teachers to students will be maintained.

Other Student-Related Provisions

The Academic Senate will make appropriate arrangements so that students who participate in the implementation committees receive incentives that serve as additional encouragement for their participation.