

# Certificación Núm. 63

## Año Académico 2018-2019

UNIVERSIDAD DE PUERTO RICO  
RECINTO DE RÍO PIEDRAS



*Senado Académico  
Secretaría*

*Yo, Claribel Cabán Sosa*, Secretaria del Senado Académico del Recinto de Río Piedras, Universidad de Puerto Rico, **CERTIFICO QUE:**

El Senado Académico, en la reunión ordinaria celebrada el 21 de febrero de 2019, acordó por unanimidad:

- Aprobar la **Propuesta de Revisión Curricular de la Maestría en Planificación** de la Escuela Graduada de Planificación.
- La Propuesta forma parte de esta Certificación.

**Y para que así conste**, expido la presente Certificación bajo el sello de la Universidad de Puerto Rico, Recinto de Río Piedras, a veintidós días del mes de febrero del año dos mil diecinueve.

  
Dra. Claribel Cabán Sosa  
Secretaria del Senado

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Certifico correcto:

  
Prof. Leticia M. Fernández Morales  
Presidenta Temporera

Anejo



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## **Academic Program Change Request: Master's in Planning Degree**

Approved by the Faculty of the GSP:

March 19, 2018

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February 12, 2019

Approved by the Academic Senate  
February 21, 2019  
(*Certification No. 63, Academic Year 2018-2019*)



## **I. Introduction**

The Graduate School of Planning (GSP) was founded in April 1965. At the time it was the first and only available graduate program in Planning in Puerto Rico, the Caribbean Basin and all of Latin America. It was influenced by the dominant planning perspectives of the United States 1960s and the works of the Economic Commission for Latin American Countries of the United Nations (CEPAL), which has drawn in students from all over the hemisphere over five decades. Since its inception, it has granted over 700 Masters in Planning degrees.

The GSP is the oldest Planning school in Latin America. It is the only Planning Accreditation Board (PAB)-accredited institution in Puerto Rico, and a leader in teaching and applied research on Planning in the island. The GSP Masters in Planning program focuses on fostering an integral and multidisciplinary education of its students promoting intellectual curiosity, critical thinking capacity, continuous learning, effective communication, and appreciation for and cultivation of ethical values, social awareness and social responsibility. The program provides a graduate professional education of the highest level, whose key elements are research and creation of new knowledge to solve needs and problems and training of professionals of the highest caliber, committed to the ideals and values of Puerto Rican society. The program also develops innovative, relevant initiatives for research and development of community services, contribute to the transformation and continuing progress of Puerto Rican society, analyze the socio-economic and political problems of the Island, and formulate solutions to these problems, in order to improve the quality of life.

The GSP's uniqueness lays in its professional program offering as the only two-year master's degree in planning in Spanish within territories of the United States of America. The natural market area for this program is Puerto Rico, the Caribbean and Latin America as well as the Hispanic market in the USA.

The GSP is a member of the Association of Collegiate Schools of Planning (ACSP) and is accredited by the Planning Accreditation Board. It has retained its accreditation since it was first granted and it is currently accredited through December 31, 2021. While the accreditation came with no conditions or findings, the recommendations provided during the last site visit included the revision of the curriculum to ascertain that content, approach, among other remained up-to-date.

The current curriculum was approved (Government Board Certification 22 of August 28, 1998) and implemented in 1998, 18 years ago. Since then other Planning programs have spurred in the Caribbean and Latin America. The planning practice became regulated in Puerto Rico. Changes that have taken place in the context in which GSP alumni/ae ought practice the profession call for a different set of skills. The Academic Policy for Graduate Studies of the Río Piedras Campus (Certification 51, 2017-2018, Academic Senate) was approved in the campus with the intention to reduce time to degree and keep graduate programs pertinent, competitive and, above all, of high-quality and excellence. In addition, the Planning Accreditation Board has recently modified evaluation standards and content requirements broadening the set of skills that Planning programs must provide to their students.

All-in-all, these circumstances provide the conditions for a thorough revision of the Masters in Planning curriculum. This document presents the GSP proposal for a significantly revised curriculum. While it is not able to meet the general 30-credit goal set out by Certification 51, due to accreditation requirements, it reduces the Program load from 48 to 46 credits while adding all the new requirements and practical skill

set, which is still acceptable under the Policy's credit limit standards for accredited programs. In order to achieve this, it revises the content of core courses and eliminates the requirement of a qualifying exam and an individual final project, thus significantly reducing time to degree for both full- and part-time students.

## **II. Justification for Change**

The University of Puerto Rico Río Piedras Campus currently offers a variety of professional degrees, the Master's Degree in Planning being one of them. Since its inception, 52 years ago, the Graduate School of Planning (GSP) has strived to prepare students for the practice of the planning profession in an environment that had restricted its definition of its practitioner largely to a generalist technician advising government officials in making decisions that advocate for the general well being of citizens in situations of great uncertainty. For decades, the GSP thus specialized in providing a limited set of skills or tools that were useful for planners in public service.

While this toolkit was more than adequate in that context, both the Planning Accreditation Board (PAB) and government officials employing GSP graduates have highlighted the need for more practical, hands-on knowledge in a new and constantly changing context. The most recent PAB Reports have pointed out the critical need of the Master in Planning Program to bring practice and today's broader planning contexts into the classroom with an agility and flexibility that historically have not characterized graduate studies in the UPR Río Piedras Campus.

Several events have changed the environments in which planners must and could intervene, and that, in turn, must trigger transformations on how they educate themselves. First, planning has become a profession that is regulated by law. While it had been regulated for a while in the USA, it had not been so in Puerto Rico until the turn of the century. GSP graduates today must be able to pass a licensing exam and maintain their knowledge up to date through continuing education. Second, for the first time serious thought has been put into drafting an ethical code for the licensed professional planner, both the recently graduated and those in the midst of their careers, highlighting the importance of continuously upgrading his/her knowledge of the regulatory framework in which the planning process must take place. Third, the public sector, government, is no longer the only context in which planning must occur. With privatization and tremendous growth in the provision of services through the non-profit sector, the role that planners have in non-governmental organizations (NGOs) and corporations has increased in importance. Demand growth for our graduates is expected to come primarily from these sectors that, in order to survive, must adapt to changes in conditions with much more agility and flexibility than government. Fourth, decision making in non-governmental organizations and corporations requires a different set of technical and non-technical skills, innovation and capacity to negotiate or mediate between actors of diverse backgrounds and levels of technical proficiency and power. Fifth, research skills have become an important component of the planning practice, rather than an alternative track for the planning practitioner.

All-in-all, these changes in the playing field of the planner present both a challenge and an opportunity for the GSP. On the one hand, the curricular content, sequence, technique, and scope need to be revised periodically in order to adequately prepare our graduates for the demands of a constantly shifting work environment. On the other hand, these changes provide a space for the GSP to broaden its program portfolio and client base, to include not only a practice-based Master's degree, but in the future, also

develop a continuing education program for mid-career professionals, certificate and degree-granting programs in multidisciplinary fields, such as urbanism and real state and a doctoral-level planning degree for those whose main interest is knowledge creation and academe, among other.

In addition, planning is multidisciplinary in nature. It deals with and requires knowledge of diverse disciplines. The current structure of the areas of emphasis for a long time has segregated the planning practice into the four primary objects of planning intervention: the territory, society, the economy and environment. However, in practice, understanding each of these requires a combination of skills and knowledge of the rest of them and interactions among them. It is for this reason that the GSP is proposing a new structure for the areas of emphasis so students can combine knowledge in different areas, as they have been naturally doing on their own without the advantages that come with formality.

Finally, while the GSP recently instituted a Mentorship Program to increase retention and reduce time to degree; these would be improved significantly with the elimination of the qualifying exam and individual final project requirements. The qualifying exam is completely eliminated, and a new course, in which each student learns how to make plans and a group practical experience of producing an actual planning instrument (plan, program, project, etc.), substitutes the Final Project requirement. This one is more in tune with the real world, where planning takes place in multidisciplinary teams of experts, and provides time structure to comply with time-to-degree requirements.

A significant change in the curriculum requirements is the substitution of the Final Project (PLAN 6614) and the Seminar for Proposal of Planning Project (PLAN 6513) by the new courses on Fundamentals of Plan Making (PLAN6XXX) and the Planning Practicum (PLAN6XXX). These two new courses will cover the same core planning skills, which include:

- Research skills that focus on definition and diagnosis of problems and needs, to identify their major causes by applying techniques for data gathering and analysis.
- Evaluation of alternative courses of action such as policies, programs and projects, to determine the cost effectiveness of their outcomes and social impacts and institutional and legal feasibility.
- Design skills to craft an implementation plan that defines objectives, and to program activities, resources and organizational structures and operations to attain such objectives.
- Evaluation of the implementation processes and their outputs and outcomes
- Effective and correct written, oral and graphic communication skills.

In the course on Fundamentals of Plan Making (PLAN6XXX) the student learns the competencies required to make plans. In the Planning Practicum (PLAN6XXX), the students work collectively with the professor, in applying the previously studied planning theories and methods to a selected problem and design a planning instrument to the issue at hand. Each student gains experience in designing and programming an intervention. It is expected that students will improve their time to degree. (See IV C. Requirements, the sections on Fundamentals of Plan Making and Planning Practicum which describe in detail how students develop the planning competencies).

In the past, most students have struggled with the completion of the Final Project on their own, and often get lost during this stage of the program as it is now. Approximately eight of every ten students do complete all requirements in 2.5 years or less, EXCEPT the Final Project. At least two years during the last

five years, 100% or 90% completed all but Final Project requirements in two years or less. While many of the reasons are not under the Program's control, such as PEAf termination after two years, getting jobs and family issues, this is proof that the greatest obstacle to complete the degree on time is the Final Project requirement. This revised curriculum addresses this issue in specific, on top of reducing the number of required courses, from 16 to 14, and credits from 48 to 46. The new curriculum revised most courses adding credit hours to some of them while eliminating others in order to give more structure to as well as promoting efficiency for the program.

This revised curriculum complies with Certification 51, 2017-18, Academic Senate for accredited programs. Furthermore, the PAB had the opportunity to review this proposed curriculum during the last visit in 2017, and recognized it addresses lengthy time-to-degree graduation process, while improving student's acquisition of necessary knowledge, skills and values. The PAB does not impose a maximum or minimum of number of curriculum credits for accreditation. Instead, recognizing the diversity of programs and contexts, the PAB requires them to provide for the student to acquire a set of knowledge, skills and values related to Planning through the curriculum, and due assessment. In this respect, the accreditation is results-oriented. See the following table for a sample of accredited programs and respective credit requirements.

Massachusetts Institute of Technology	Master in Urban Planning	66
Rutgers, The State University of New Jersey	Master of City and Regional Planning	48
Harvard University	Master in Urban Planning	80
Georgia Institute of Technology	Master of City and Regional Planning	55
University of Southern California	Master of Planning Program	48
Cornell University	Master of Regional Planning	60
Texas A&M University	Master of Urban Planning	48
University of Michigan	Master of Urban and Regional Planning	48
University of Colorado, Denver	College of Architecture and Planning	54
Berkeley, University of California	Master of City Planning	48

PAB expects the University to adopt, implement and show its results for next accreditation review, 2021.

### **III. Description of Current Curriculum**

The current curriculum was approved and put into effect on 1998. It requires 48 credits, as follows:

- 24 credits in core courses, covering theories, methods and techniques of planning;
- 9 credits in an area of emphasis;
- 3 credits in a Planning Project Proposal, including the conceptual and methodological framework of a planning topic, which also doubled as a qualifying exam;
- 3 credits in a Planning Project to be completed by each student individually;
- 9 credits in unrestricted elective courses.

The core courses include:

- Planning Theory,
- Institutional Frameworks and Implementation Processes,

- Planning of the Public Sector ,
- Methods of Analysis for Planning I,
- Methods of Analysis for Planning II,
- One of five planning techniques courses (Scenario Construction and long-range Planning, Evaluation of Plans, Programs and Projects, Needs Assessment and Client Analysis, Workshop on Methods for Diagnosis, Prognosis and Programming, Spatial Decision Support and Policy Evaluation Systems)
- Two theory courses from the four areas of emphasis provided, including one in the student's area of emphasis (Current theory course options: PLAN6096 - Social Analysis and Policies for Planning; PLAN6097 - Economic Analysis and Policies for Planning; PLAN6089 - Urban and Territory Planning; and PLAN6135 - Society, Environment and Planning).

Four areas of emphasis currently exist: Urban and Land Use Planning; Environmental and Natural Resource Planning; Social Policy and Planning; and Planning Economic Systems. Most students use their unrestricted electives towards a second area of emphasis among the provided choices. They are currently described as follows:

1. **Urban and Land Use Planning** focuses on ordering territory and the human settlements upon it, dealing with conflict resolution in land use, recognizing zoning as an instrument for efficient and harmonious design, and examining preservation of the developed environment with a particular concern for those structures and sectors of historical and architectural value. It addresses the impact of climate changes on population settlements and land use patterns.
2. **Environmental and Natural Resource Planning** studies ecosystems and identifies environmental sustainability requirements of development, measuring the impacts of projects on the environment and preparing environmental rules and norms to reduce the damaging effects of externalities caused by infrastructure projects, natural disasters and the impacts of climatic change. It assesses social equity issues and community actions to deal with impacts of economic and infrastructure projects.
3. **Social Policy and Planning** addresses professional applications to solve social problems and attend social needs through effective organizational strategies to strengthen the capacity of self-development, community organization, and provision of social services. It studies areas of policy and provision of services that improve welfare and quality of life, such as housing, education, health, and social needs.
4. **Planning Economic Systems** designs policies and applies instruments for the development and strengthening of the national, regional, urban or sector-specific economy, adopting strategic approaches that confront geopolitical and technological developments and effects of climate change. It assigns and manages the resources for development of public and private firms, making use of program budgeting, impact analysis of projects, cost benefit techniques, and corporate strategic planning. It draws long-range scenarios and alternative futures and estimates of risks of potential damages and the loss of economic and social values.



Admissions requirement in addition to those of the Río Piedras Campus are the following:

- A bachelor's degree in any field of study from an accredited university, with a GPA of 3.0 on a scale of 4.0.
- EXADEP scores, with a minimum score of 500 (GRE scores will be accepted only for students who do not speak Spanish).
- Courses in mathematics, statistics, sociology and economics, passed with a grade of "B" or higher. Students are recommended to take these courses in their undergraduate studies. The Graduate School of Planning offers remedial courses during the first semester session, subject to availability of resources.
- A written essay stating the reasons for choosing this program.
- Full knowledge of Spanish and English
- Basic mastery of computing.
- Two letters of recommendation (forms will be provided by the Graduate School).
- An interview, if deemed necessary by the Admissions Committee.

In addition to the general Río Piedras Campus graduation requirements, the student must successfully complete:

- 48 credits in a specialty area with a minimum grade point average of 3.00. Courses with a "C" grade may be credited only if the grade does not lower the GPA below 3.0.
- A comprehensive examination through preparation and defense of a research paper on the theory and methods that will be used in the Planning Project. Research will be conducted according to the guidelines of the Graduate School of Planning.
- Successful completion of the Planning Project;
- Complete degree requirements within 6 years.

#### **IV. Proposed Changes to Academic Program**

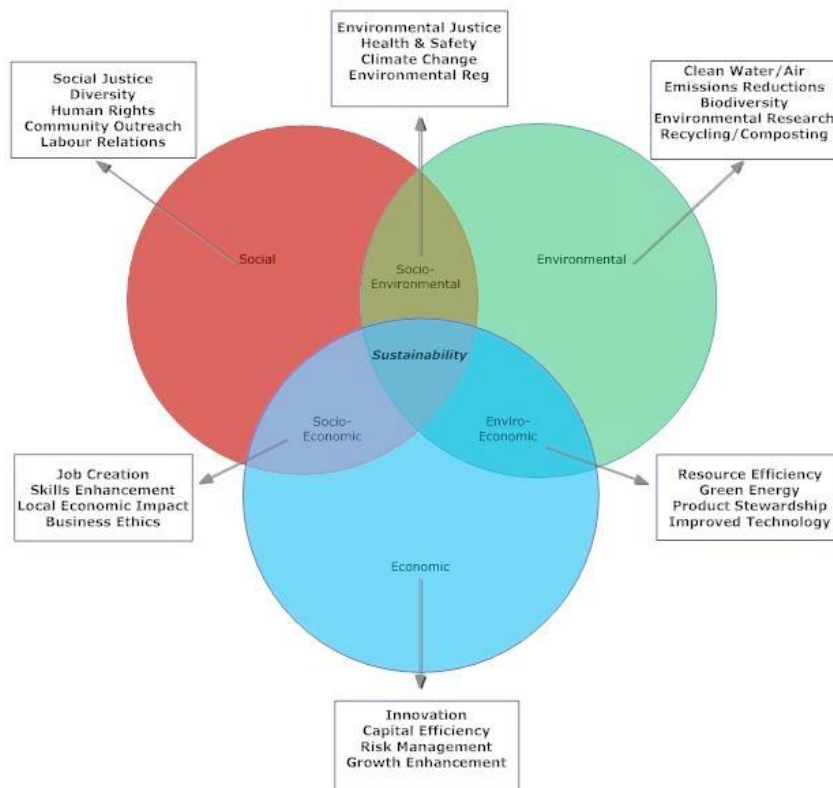
The GSP proposes changes in the following areas:

##### ***A. Focus or Approach***

Among the goals of this revision is to design a curriculum that is sufficiently broad and flexible that it will remain pertinent in the face of a changing context; that it will provide a set of skills from which to choose as time passes and circumstances vary.

The GSP proposes a curriculum that on the one hand, will study the dimensions of development as a process and the tensions that derive from the interaction of human, natural, social and economic systems during that process in which sustainability becomes a primary goal. On the other, the phenomena that arise from these interactions rather than occur in abstract space, take place in territorial space. In recognition of this, the revised curriculum proposes new areas of emphasis in which the spatial context at diverse scale is always present.

**Sustainability Venn Diagram**



### **B. Desired Alumni/ae Competence Profile**

Over the last two years, the GSP adopted as a goal the development of specific skills in all Masters in Planning degree receivers. Those skills were to satisfy the demands of the current context, in terms of labor market needs, accreditation requirements, and the strategic policy framework of the school, the campus and the university system. The proposed curricular revision is aligned with the adopted competence profile described below. It is organized in General Planning Knowledge, Specific Planning Skills/Techniques, and Values and Ethics.

Competence Profile
General Planning Knowledge
Mastery of diverse approaches and levels of abstraction
Familiarity with diverse bodies of knowledge or disciplines
Ability to recognize and manage diversity and/or plurality (socio-demographic, environmental, economic, etc.)
Capacity to handle diverse scales of analysis simultaneously (urban, regional, global, etc.)

Ability to design and create a variety of planning instruments (policies, plans, programs, projects, etc.)
Capacity to work in inter- and multidisciplinary teams and environment
Practical, hands-on experience
<b>Specific Planning Skills</b>
Capacity to design and conduct practice-based, intervention-oriented research, and disseminate results and contributions
Ability to communicate ideas effectively (written, verbal, graphic)
Mastery of technical writing applied to proposal writing the drafting of public policy documents, among other.
Ability to work with software programs for data processing and analysis as well as for programming and transmitting information (project management, statistics, CAD, simulation, etc.)
Ability to design and conduct spatial analysis processes / digital cartography / Geographic Information Systems
Orientation towards solving problems and implementing solutions
Aptitude for the evaluation of pertinence and adequacy of solutions
Mastery of techniques for scenario design and evaluation, prognosis, etc.
Mastery of core quantitative and qualitative methods, including: <ul style="list-style-type: none"> <li>· Descriptive and inferential statistics</li> <li>· Cost-benefit analysis</li> <li>· Questionnaire design</li> <li>· Focus groups and interviews</li> <li>· Field work plans</li> </ul>
Leadership
Entrepreneurial spirit
<b>Values and Ethics</b>
Commitment with sustainability
Sense of social responsibility and a commitment with equity
Awareness of the ethical boundaries of the planning practice
Ability to navigate through institutional/political process dynamics
Use of critical thought

### C. Requirements

The proposed curriculum reduces the Program load from 48 to 46 credits, while adding all the new content required by the Planning Accreditation Board. It does so primarily by eliminating several requirements of the current curriculum; modifying the content of core courses that remain as requirements; and adding five new core courses. This reduces credit in core courses from 30 to 28.

#### Current Curriculum and Revised Courses

Course	Credits*	Proposed Change	Credits*
PLAN6076 - Planning Theory	3	Becomes PLAN6076 - Planning History and Theory. It is revised to incorporate planning history and contemporary planning debates.	3
PLAN6077 - Institutional Frameworks and Implementation Processes	3	Becomes PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma. It is revised to focus on the Implementation aspect of planning and provide a gateway to areas of emphasis.	3
PLAN6551 - Methods of Analysis for Planning I	3	The course is eliminated/deactivated. It is substituted with PLAN6XXX - Geographic Information Systems for Planning.	4
PLAN6552 - Methods of Analysis for Planning II	3	Becomes PLAN6552 - Research and Analysis Methods. Credits increase to 4 to broaden qualitative tools covered.	4
PLAN6610 - Public Sector Planning	3	The course is eliminated/deactivated. It is substituted with PLAN6XXX – State, Market and Governance in Planning.	3
Theory Course in Area of Emphasis	3	Remains but sequence for area of emphasis courses is established.	NA
Second Theory Course	3	The requirement is eliminated. Substituted with a Policy Course within the area of emphasis.	NA
1 of 5 General Technique Courses	3	The requirement is eliminated. Substituted with a Specialized Method Course within the area of emphasis.	NA
PLAN6513 - Seminar: Proposal for Planning Project	3	The course is eliminated/deactivated. Substituted with PLAN6XXX – Fundamentals of Plan Making.	3

PLAN6614 - Final Planning Project	3	The course is eliminated/deactivated. Substituted with PLAN6XXX – Planning Practicum.	5
3 courses in area of emphasis	9	Remains but sequence for area of emphasis courses is established: Theory, Policy, Methods.	9
3 unrestricted electives	9	Remains.	9
		PLAN6XXX - Planning Law is added.	3
<b>Total</b>	<b>48</b>		<b>46</b>

\* In all cases, the number of credits refers to the number of contact hours per week. Three credit courses meet three hours a week (45 hours a semester); those of four credits meet four hours a week (60 hours a semester); those of five credits meet five hours a week (75 hours a semester).

The following courses are eliminated:

- **Seminar: Proposal for Planning Project** (PLAN6513). In this course students develop a proposal for a plan, program or project. It contains a Needs or Problem Statement, Theoretical or Conceptual Framework and Methodology. Its Conceptual Framework section doubles as a **Qualifying Exam**. The skills currently developed here will be built in two new courses Fundamentals of Plan Making (PLAN6XXX) and Planning Practicum (PLAN6XXX).

**Final Planning Project** (PLAN6614). In this project students develop a plan, program or project individually, but under the supervision of a professor. The skills currently developed here will be built in a new course Planning Practicum (PLAN6XXX) where they also develop a planning instrument, such as a plan, program or project, but in a group setting.

- **Methods of Analysis for Planning I** (PLAN6551), which deals largely with information systems. It has been proven that with improved access to computers and software packages students tend to bring that knowledge with them when they start the Program.

The following courses are modified in content:

- **Planning History and Theory** (Revised, Previously Planning Theory, PLAN6076) – It is modified to incorporate the historical context of theories being discussed. It includes the most recent theoretical debates. It introduces the Program's two main vectors: the dimensions and tensions of development, and the territory at its diverse scales. It also introduces the concept of general well being and its importance to the discipline.
- **Introduction to the Planning Profession: the Implementation Dilemma** (Revised, Previously Institutional Frameworks and Implementation Processes, PLAN6077) – It is restructured to address the challenges of implementation of planning instruments from the perspective and implications of the professional practice. It uses case studies in each of the areas of emphasis to provide a gateway that will enable students to choose and

declare the focus of their choice.

- **Research and Analysis Methods** (Revised, Methods of Analysis for Planning II, PLAN6552) It is expanded to 4 credits to incorporate qualitative research methods to the quantitative techniques already present in the original course.

Five new requirements are added as core courses:

- **State, Market and Governance in Planning** (New, Substitutes Planning of the Public Sector, PLAN6610) It presents the institutional frameworks under which Planning is practiced as a profession. It discusses the role and boundaries of the Market & State. It addresses issues of governance, participation, deliberation and social / civil movements towards diversity and its limits. It also discusses the ethical and functional conflicts arising from these contexts.
- **Geographic Information Systems for Planning:** (New, Substitutes Methods of Analysis for Planning I PLAN6551) An introduction to geographic information systems (GIS) as applied to urban and regional planning, community and economic development, environmental analysis and local government, among other. Emphasis on learning GIS technology and spatial analysis techniques through extensive hands-on exercises using real-world data sets such as the US census of population and housing. Includes a small project on a planning problem involving the selection of appropriate methods, the use of primary and secondary data, computer-based modeling, and spatial analysis. Employers have highlighted this skill as crucial in today's planning workplace.
- **Planning Law:** (PLAN6116, Revised, previously not a requirement) The purpose of the course is to provide students with a basic understanding of the theories, rationales, techniques, and implementing institutions involved in legally controlling the possession, use, development, and preservation of land. Particular attention is paid to the law's intended and unintended impacts on the physical pattern of built environments and resulting social and economic outcomes, on the increasing overlap of land use law and environmental law regimes, and on the tensions between individual rights and asserted socio-economic goals often resolved within the context of constitutional law by the courts. Law's approach is distinguished from those employed by other fields and disciplines, including planning. The role of the non-lawyer professional (planner, designer, public policymaker, developer, activist, etc.) in the crafting and implementation of land use and environmental laws is highlighted. This has been required by the Planning Accreditation Board.
- **Fundamentals of Plan Making:** (New, PLAN6XXX) Through this course the student learns how to prepare plans early in the Program so that this knowledge can be applied in other courses, rather than having to put a plan together on his/her own at the end of the Program in a capstone manner, as is the case in the current curriculum. They learn the answers to the following questions:

- Local planning framework: When and why should we make plans? How do local government structures affect plans? What are the common tools in the local planning process? What roles do stakeholders play?
  - Analyses for plan making: Which combination of techniques should we choose for a given planning situation? How do we connect findings from multiple techniques? How do we communicate their outcomes to stakeholders?
  - Planning process skills: When stakeholders have fundamentally different ideas about how actions relate to outcomes and what aspects of the world are important, what is the role of the planner? How do uncertainties inherent in many planning situations further complicate decision-making? How can scenario analysis and conflict resolution skills assist planners?
- **Planning Practicum:** (New, PLAN6XXX) This becomes the new end-of-degree experience. Practicum courses are defined as a course designed especially for the preparation of practicing professionals that involves the supervised practical application of previously studied theory. It is a modality of practice-based learning in which course participants work for a real client as a team under the supervision of a professor. They develop a planning instrument that is appropriate to the planning issue at hand.

Students and faculty in various areas of emphasis would collaborate in the analysis of a topical problem and the joint development of a planning instrument. They address specific issues and conditions of the selected area and their communities. They clearly link conclusions and recommendations to field research and / or secondary data. They integrate the theory and methods of the core courses. The subject and client vary by semester. The instrument or product may include methodologies, public policies, plans, programs, projects, guides and regulations, among others. The selection of the appropriate instrument for the situation to be addressed is part of the exercise. They should select a scope and scale appropriate to the nature of this course and the time available. Although they work in group, each student is responsible for the design and programming of at least one intervention. With the new course approach and format, students would be expected to improve their time to degree significantly.

The following are also required in terms of area of emphasis and unrestricted electives:

- **9 credits in an area of emphasis**, in a sequence that includes three courses that in combination provide the necessary exposure to theory, methodology and policy issues relevant to the student's interest. This eliminates the need for a second theory course and substitutes it with course content covering policy debates on the student's selected thematic focus. In addition, the method course is now more specific to the student's area of emphasis than in the current curriculum. The appendix includes a list of the courses required for each area of emphasis with titles and codes, their syllabi and required forms. Several courses have been revised and updated. In addition, two new courses have been created: PLAN6XXX - Foundations of Economic Development y PLAN6XXX Economic Development Analysis and Policies.

- **9 credits in unrestricted elective courses.** In order to meet all accreditation requirements and labor market demands, while reducing the total credits associated with the degree, the proposal incorporates 9 credits in unrestricted elective courses. An added value of this part of the curriculum, is the opportunity of integrating dual degrees and accelerated undergraduate-masters programs. GSP has drafted curricular sequences in collaboration with the School of Architecture, School of Law and School of Public Administration in order to improve academic offer of the four Schools. The process is at different stages respectively, and all dependent on the approval of this revised curriculum. The same situation awaits for an accelerated bachelors-masters degree with General Studies, for which a draft proposal is available, as well as with the Geography Program. Unrestricted electives in this respect support the improvement all of six Schools and Programs based on synergy, which makes them more attractive for a more competitive and shrunk graduate studies market.

It is important to emphasize that the elimination of the PLAN 6513 course will not affect the coverage of the methodological aspects of planning research. On the contrary, the new curriculum seeks to strengthen that component explicitly. In fact, the emphasis in this aspect is part of the accreditation requirements of the Planning Accreditation Board and was one of the positive observations on the new curriculum in the last evaluation for reaccreditation. The proposed strengthening is achieved with four actions:

- (1) The first is the revision and expansion to 4 credits of the PLAN 6552 course, which focuses on the qualitative and quantitative methodological aspects of planning research. Specifically, this course will discuss methods that are used to analyze economic, social and environmental problems in a context of urban and regional planning. Methods of compilation, organization, summary, visualization and interpretation of data are studied, paying particular attention to the management of social data. The course covers the following topics: 1. The Use of Statistics in the Study of Social Problems, which provides a background of the application of statistics to social sciences and planning (4 hours), 2. Descriptive Statistics including central tendency, distributions, etc., with particular emphasis on the properties and interpretations required for spatial cross-sectional data (4 hours), 3. Methods of qualitative analysis, including grounded theory, ethnographic, narrative and action-research, and the collection of data using focus groups, biographies and life histories, triangulation of data collection methods, and analysis of computer-assisted data (16 hours), 4. Sampling methods (2 hours), 5. Design of questionnaires (4 hours), 6. Benefit Cost Analysis with emphasis on the application to problems where one needs to select from a number of viable projects or intervention alternatives (12 hours), 7. The Use of the US Department of Commerce data in Planning, particularly censuses such as Population and Housing, the Economic, and the County Business Patterns, applied to various analysis of planning problems over the territory (8 hours), 8. Correlation Analysis, discussing the concept of spatial correlation and its interpretation (4 hours), and 9. Linear Regression Analysis, where one will learn to estimate and interpret the results of a linear regression analysis (6 hours).
  - (2) The second action is to strengthen the Methods course required in each of the three areas of emphasis (courses called "Emphasis Methods"):
- PLAN 6546 - Econometrics for Planners (for the area of Economic Development and



Community), which discusses problems of estimation and inference in the context of linear regression, including the three main problems associated with econometric analysis: multicollinearity, heteroskedasticity and the autocorrelation.

- PLAN 6525 - Urban Structure (for the area of Urban and Regional Planning), which offers an integrating experience of theory and practice in which students apply urban planning analysis techniques to examine the morphology, ordering and qualities of urban space and its inhabitants, including geographical, sociological, economic, functional and technological factors that affect urban areas.
- PLAN 6607 - Analysis Techniques for Environmental Planning (for the area of Society and Environment), which offers background and practical applications of different types of techniques: those designed for the evaluation or characterization of environmental problems, including socio-environmental indicators, cause-effect analysis, and articulation of values and actors, as well as the environmental impact of projects (e.g. environmental impact analysis); those that seek specification of objectives and possible futures (e.g. analysis of scenarios), and those that seek to evaluate alternatives (e.g., multi-criteria analysis, cost-benefit analysis).

(3) The third action taken to strengthen the research dimension applied to planning is the course Methods of Spatial Analysis / Geographic Information Systems for Planning (PLAN6XXX).

(4) The last action is the new Practicum course, a practice-based learning modality in which course participants work for a real client as a team under the supervision of a professor and develop planning tools that are appropriate for the subject of planning in question. Students and professors in various areas of emphasis will collaborate in the analysis of a current problem and in the joint development of a planning instrument. They will have to clearly connect the conclusions and recommendations to the field research and / or secondary data, and in this way integrate the theory and methods of the basic courses.

All of these comply with the research skills component required for the Program's accreditation and are strongly aligned with Certification 51, specifically:

- guiding principle of graduate programs # 7, on promoting "the full development of students' abilities for the application of critical analysis skills, systemic, strategic, inter and transdisciplinary thinking, and the development of an inquisitive, enterprising, creative and innovative attitude",
  - general characteristic (b) that indicates that "The research / creation competencies will form part of the [student] profile and will be integrated throughout the program's curricular sequence"
  - general characteristic (d.1) "They will provide a research / creation experience to their students whose objective will be that the student demonstrates that he/she knows the foundations and methods of his/her discipline or area of knowledge and that he/she can apply them to raise or demonstrate a viable solution to a problem "
- general characteristic (d.2) "Define the research / creation competencies that the student will acquire through the research / creation experience, establish the criteria and rubric for their evaluation and the maximum time to complete them". Regarding the latter, as detailed in the

Learning Assessment Table, the evaluation of the specific skill of "capacity to design and conduct practice-based, intervention-oriented research", will be evaluated with the aforementioned courses (PLAN 6552, Emphasis Methods, Practicum).

#### ***D. Areas of Emphasis***

The current portfolio of courses is reorganized into three proposed areas of emphasis. These deal with the jointures and tensions between common planning topics. They are also aligned with the trends for Planning Schools and the discipline in the hemisphere. Instead of studying and addressing the issues of social equity and economic opportunity independently, they will be looked at jointly at specific scales (community, city, region). Similarly, the new curriculum will deal with the tensions and junctures between social and environmental issues at diverse geographic levels, while the urban and regional planning issues regarding land use, infrastructure, among other, now will be analyzed in the context of their social and economic development dimensions (not just the physical – environmental realm). Consequently, the new areas of emphasis are defined as follows:

1. **Economic Development and Community** - Focuses on the equitable development at the community, city and regional levels. Studies the junctures and tensions between economic growth and equity, as well as between social and economic policies, and their impact on the quality of life and society's general well-being. It focuses on how to create equity and economic opportunity from the perspective of localities, their government, corporations, communities and individuals. Analyzes the role of participation of these entities in social and economic development in cities. The course sequence for this area of emphasis will be:
  - a. PLAN6XXX Theories of Community and Economic Development
  - b. PLAN6XXX Community and Economic Development Policy
  - c. PLAN6XXX Tools and Techniques for Analyzing Economic Development Issues
2. **Urban and Regional Planning** - The region is defined as a continuous territorial unit that shares elements of homogeneity and / or consistency and that can vary in size or scale. Then, this area of emphasis includes the affairs of the city recognizing their spatial dimensions at various scales, from the local level (such as the sector) to the supranational region (as is the Caribbean Region). Among the topics covered are urban design, urban planning, land use, regional planning, regional development, and infrastructure systems planning, including water, energy, road, mass-transit and non-motorized transportation, parks and other green spaces, technology / telecommunications, etc., as determinants of development capacity. It seeks to prepare planners with a broad perspective and a genuine commitment to striving for habitable, supportive and resilient settlements. The course sequence for this area of emphasis will be:
  - a. PLAN6089 Urban and Territorial Planning
  - b. PLAN6528 Urban Policy
  - c. PLAN6525 Urban Structure

3. **Society and Environment** - This area of emphasis aims to provide students interested in environmental issues a solid theoretical, practical and methodological framework (1) to analyze and fully understand environmental problems, their causes and their interrelation with the socio cultural context (political, economic, etc.); and (2) to identify ways in which planning can have an impact on these problems in order to move towards more livable and sustainable territories. The course sequence for this area of emphasis will be:
- PLAN6135 Society, Environment and Planning
  - PLAN6617 Environmental and Natural Resource Policy
  - PLAN6607 Analytical Techniques for Environmental Planning

## V. New Curricular Options & Sequence

With the proposed revision, full-time students can complete the program in two years. Part-time students can complete it in 3.5 years, which constitutes a significant reduction in time to degree.

### Full – Time Student Sample Sequence

First Semester	Credits	Third Semester	Credits
PLAN6076 Planning History and Theory	3	PLAN6XXX State, Market and Governance in Planning	3
Plan 6XXX GIS for Planning	4	Emphasis Theory	3
PLAN6077 Introduction to the Planning Profession: the Implementation Dilemma	3	Emphasis Method	3
		Unrestricted Elective	3
<b>Total</b>	<b>10</b>	<b>Total</b>	<b>12</b>
Second Semester	Credits	Fourth Semester	Credits
PLAN6552 Research and Analysis Methods	4	Emphasis Policy	3
PLAN6116 Planning Law	3	PLAN6XXX Planning Practicum	5
PLAN6XXX Fundamentals of Plan Making	3	Unrestricted Elective	3
Unrestricted Elective	3		
<b>Total</b>	<b>13</b>	<b>Total</b>	<b>11</b>
		Grand Total	46

## Part – Time Student Sample Sequence

First Semester	Credits
PLAN6076 Planning History and Theory	3
Plan 6XXX GIS for Planning	4
<b>Total</b>	<b>7</b>

Second Semester	Credits
PLAN6XXX Fundamentals of Plan Making	3
PLAN6552 Research and Analysis Methods	4
<b>Total</b>	<b>7</b>

Third Semester	Credits
PLAN6077 Introduction to the Planning Profession: the Implementation Dilema	3
PLAN6XXX State, Market and Governance in Planning	3
<b>Total</b>	<b>6</b>

Fourth Semester	Credits
PLAN6116 Planning Law	3
Unrestricted Elective	3
<b>Total</b>	<b>6</b>

Fifth Semester	Credits
Emphasis Theory	3
Emphasis Method	3
<b>Total</b>	<b>6</b>

Sixth Semester	Credits
Emphasis Policy	3
Unrestricted Elective	3
<b>Total</b>	<b>6</b>

Seventh Semester	Credits
PLAN6XXX Planning Practicum	5
Unrestricted Elective	3
<b>Total</b>	<b>8</b>

Grand Total	46
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## VI. Curricular Comparison Tables

<b>Current Curriculum</b>	<b>Credits</b>
<b>CORE COURSES</b>	<b>15</b>
PLAN6076 - Planning Theory	3
PLAN6077 - Institutional Frameworks and Implementation Processes	3
PLAN6551 - Methods of Analysis for Planning I	3
PLAN6552 - Methods of Analysis for Planning II	3
PLAN6610 - Public Sector Planning	3
<b>AREAS OF EMPHASIS</b>	<b>18</b>
Two Theory Courses	6
1 of 5 General Technique Courses	3
Three electives of Emphasis	9
<b>THREE UNRESTRICTED ELECTIVES</b>	<b>9</b>
<b>PROPOSAL (EXAM)</b>	<b>3</b>
PLAN6513 - Seminar: Proposal for Planning Project	3
<b>FINAL PROJECT</b>	<b>3</b>
PLAN6614 - Final Planning Project	3
<b>Total</b>	<b>48</b>

<b>Proposed Curriculum</b>	<b>Credits</b>
<b>CORE COURSES</b>	<b>28</b>
PLAN6076 - Planning History and Theory	3
PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma	3
PLAN6XXX - Geographic Information Systems for Planning	4
PLAN6552 - Research and Analysis Methods.	4
PLAN6XXX – State, Market and Governance in Planning.	3
PLAN6XXX - Planning Law	3
PLAN6XXX – Fundamentals of Plan Making.	3
PLAN6XXX – Planning Practicum (5 credits).	5
<b>AREAS OF EMPHASIS</b>	<b>9</b>
One theory course in area of Emphasis	3
One policy course in area of Emphasis	3
One method course in area of Emphasis	3
<b>THREE UNRESTRICTED ELECTIVES</b>	<b>9</b>
<b>Total</b>	<b>46</b>

## **VI. Budgetary Implications**

No budgetary implications are foreseen. The proposed curriculum allows for a more effective and efficient use of Program resources and the destination of faculty hours to the much-needed mentorship of students as a retention mechanism. In addition, accreditation costs will remain as they are now.

## **VII. Learning Assessment Plan**

The Learning Assessment will be based on the competence profile that the Program has set as a goal to develop in our students. Each skill, competence or value will be part of the evaluation rubric for courses that include their development as learning objectives and will be assessed a minimum of two times during the length of the Program. The table below lists the skills, competences, and values that are part of the profile, the activity or means that will be used for the assessment and the two courses or instances when the activity or means will be conducted. Professors in charge of those courses will forward the results of the assessment activities to the Program's Academic Coordinator who will be responsible to maintain records and inform the student's mentor of his/her progress.

## LEARNING ASSESSMENT PLAN

Competence Profile	Assessment Plan		
	To be included as a factor in the evaluation rubric for:	1st Instance	2nd Instance
<b>General Planning Knowledge</b>			
Mastery of diverse approaches and levels of abstraction	Oral Presentation & Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
Familiarity with diverse bodies of knowledge or disciplines	Final Written Report	PLAN6076 Planning History & Theory	PLAN6XXX Planning Practicum
Ability to recognize and manage diversity and/or plurality (socio-demographic, environmental, economic, etc.)	Final Written Report	PLAN6076 Planning History & Theory	PLAN6016 Planning Law
Capacity to handle diverse scales of analysis simultaneously (urban, regional, global, etc.)	Final Written Report	PLAN6XXX - Geographic Information Systems for Planning	PLAN6XXX Planning Practicum
Ability to design and create a variety of planning instruments (policies, plans, programs, projects, etc.)	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
Capacity to work in inter- and multi-disciplinary teams and environment	Oral Presentation	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
Practical, hands-on experience	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
<b>Specific Planning Skills</b>	<b>To be included as a factor in the evaluation rubric for:</b>	<b>1st Instance</b>	<b>2nd Instance</b>
Capacity to design and conduct practice-based, intervention-oriented research, and disseminate results and contributions	Final Written Report	Planning & Research Methods	PLAN6XXX Planning Practicum
Ability to communicate ideas effectively (written, verbal, graphic)	Oral Presentation & Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum

Mastery of technical writing applied to proposal writing the drafting of public policy documents, among other.	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6016 Planning Law
Ability to work with software programs for data processing and analysis as well as for programming and transmitting information (project management, statistics, CAD, simulation, etc.)	Final Written Report	PLAN6XXX - Geographic Information Systems for Planning	PLAN6XXX Planning Practicum
Ability to design and conduct spatial analysis processes / digital cartography / Geographic Information Systems	Final Written Report	PLAN6XXX - Geographic Information Systems for Planning	PLAN6XXX Planning Practicum
Orientation towards solving problems and implementing solutions	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
Aptitude for the evaluation of pertinence and adequacy of solutions	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
Mastery of techniques for scenario design and evaluation, prognosis, etc.	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
Mastery of core quantitative and qualitative methods	Final Written Report	PLAN6552 - Research and Analysis Methods	PLAN6XXX Planning Practicum
Leadership	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
Entrepreneurial spirit	Final Written Report	PLAN6XXX Fundamentals of Plan Making	PLAN6XXX Planning Practicum
<b>Values and Ethics</b>	<b>To be included as a factor in the evaluation rubric for:</b>	<b>1st Instance</b>	<b>2nd Instance</b>
Commitment with sustainability	Final Written Report	PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma	PLAN6XXX Planning Practicum
Sense of social responsibility and a commitment with equity	Final Written Report	PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma	PLAN6XXX Planning Practicum



Awareness of the ethical boundaries of the planning practice	Final Written Report	PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma	PLAN6XXX Planning Practicum
Ability to navigate through institutional/political process dynamics	Final Written Report	PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma	PLAN6XXX Planning Practicum
Use of critical thought	Final Written Report	PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma	PLAN6XXX Planning Practicum

# Appendixes

## Part I. Core Courses

- 1A. PLAN6076 - Planning History and Theory - Syllabus
- 1A. PLAN6076 - Planning History and Theory - Course Change Request Form
- 2A. PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma - Syllabus
- 2B. PLAN6077 - Introduction to the Planning Profession: the Implementation Dilemma - Course Change Request Form
- 3A. PLAN6552 - Research and Analysis Methods – Syllabus
- 3B. PLAN6552 - Research and Analysis Methods – Course Change Request Form
- 4A. PLAN6XXX - State, Market and Governance in Planning – Syllabus
- 4B. PLAN6XXX - State, Market and Governance in Planning – Course Creation Request Form
- 4C. PLAN6610 - Public Sector Planning - Course Inactivation Request Form
- 5A. PLAN6XXX -Geographic Information Systems for Planning – Syllabus
- 5B. PLAN6XXX - Geographic Information Systems for Planning – Course Creation Request Form
- 5B. PLAN6551 - Planning Methods I – Course Inactivation Request Form
- 6A. PLAN6116 - Planning Law – Syllabus
- 6B. PLAN6116 - Planning Law - Course Change Request Form
- 7A. PLAN6XXX – Fundamentals of Plan Making– Syllabus
- 7B. PLAN6XXX - Fundamentals of Plan Making – Course Creation Request Form
- 8A. PLAN6XXX - Planning Practicum - Syllabus
- 8B. PLAN6XXX - Planning Practicum - Course Creation Request Form
- 8C. PLAN6513 - Planning Proposal - Course Inactivation Request Form
- 8D. PLAN6614 - Planning Project - Course Inactivation Request Form
- 8E. PLAN6896 – Planning Project Continuation - Course Inactivation Request Form

## Part II. Required Courses for Areas of Emphasis

- 9A. PLAN6089 - Urban and Territorial Planning – Syllabus
- 9B. PLAN6089 - Urban and Territorial Planning – Course Change Request Form

- 10A. PLAN6528 - Urban Policy – Syllabus
- 10B. PLAN6528 - Urban Policy – Course Change Request Form
- 11A. PLAN6525 - Urban Structure - Syllabus
- 11B. PLAN6525 - Urban Structure - Course Change Request Form
- 12A. PLAN6XXX – Theories of Community and Economic Development - Syllabus
- 12B. PLAN6XXX – Theories of Community and Economic Development - Course Creation Request Form
- 13A. PLAN6XXX – Community and Economic Development Policy - Syllabus
- 13B. PLAN6XXX – Community and Economic Development Policy - Course Creation Request Form
- 14A. PLAN6546 – Tools and Techniques for Analyzing Economic Development Issues - Syllabus
- 14B. PLAN6546 – Tools and Techniques for Analyzing Economic Development Issues - Course Change Request Form
- 15A. PLAN6096 –Theories and Policies for Social Development and Welfare - Syllabus
- 15B. PLAN6096 – Theories and Policies for Social Development and Welfare – Course Change Request Form
- 16A. PLAN6485 – Social Services Planning - Syllabus
- 16B. PLAN6485 – Social Services Planning – Course Change Request Form
- 17A. PLAN6118 – Needs Assessment and Client Analysis - Syllabus
- 17B. PLAN6118 – Needs Assessment and Client Analysis - Course Change Request Form
- 18A. PLAN6135 – Society, Environment and Planning – Syllabus
- 18B. PLAN6135 – Society, Environment and Planning – Course Change Request Form
- 19A. PLAN6617 – Environmental and Natural Resources Policy - Syllabus
- 19B. PLAN6617 – Environmental and Natural Resources Policy - Course Change Request Form
- 20A. PLAN6607 – Analytical Techniques for Environmental Planning - Syllabus
- 20B. PLAN6607 – Analytical Techniques for Environmental Planning - Course Change Request Form