

APR•IA

Architecture Program Report for NAAB Initial Accreditation Visit

**Pontifical Catholic University of Puerto Rico
Bachelor of Architecture [192 Credit Hours]**

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2013

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I. PART ONE: INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

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I.1. IDENTITY & SELF-ASSESSMENT

I.1.1. HISTORY AND MISSION

INSTITUTIONAL HISTORY



The Pontifical Catholic University of Puerto Rico (PCUPR) is a co-educational non-profit private institution of higher education with bonds to the Catholic Bishops Conference of Puerto Rico. It was founded in Ponce, the largest city of the southern region of Puerto Rico, in September 1948 under the guidance of the Bishops of Puerto Rico and was affiliated with Catholic University of America in Washington, DC. The university was incorporated by the Board of Regents of the University of the State of New York and granted an absolute charter as an institution of higher learning with programs leading to academic and professional degrees. It was accredited in 1948 by the Council of Higher Education of Puerto Rico (now the Puerto Rico Education Council) and in 1953 by the Middle States Association of Colleges and Secondary Schools. In 1959 a center was established in Arecibo, located in the northwestern part of the island; in 1960 another center was established in Mayagüez on Puerto Rico's west coast. Both Arecibo and Mayagüez became branch campuses in 1986.

Established as a teacher-training college, the university has grown to become a comprehensive institution with 157 academic programs that offers 13 associate, 73 bachelor's, 36 master's, 8 doctoral degrees, 10 professional certificates, and a degree in law as well as 9 binary and 6 combined programs.

Beginning in 1954, degrees in Business Administration and in Secretarial Sciences were granted. In the field of science and in response to the community's need for professionals in the medical field, Nursing and Medical Technology programs were developed in 1956 and 1967 respectively, the latter of which was accredited in 1968 by the American Medical Association (AMA).

In 1961, the School of Law was added to the universities offering. The College of Arts and Sciences was divided in 1966 into the College of Arts and Humanities, the College of Science, and the College of Business Administration. Master's degree programs were established in Education (1967), Business Administration (1969), Nursing (1976), and Hispanic Studies (1976), all accredited by the respective agencies. The School of Medicine was established in 1976-77 and reorganized as a

Foundation under the name of the Ponce School of Medicine in 1979, while still maintaining strong academic and research ties with the University.

PCUPR was canonically established in 1972 and granted the title of Pontifical in 1991. This distinction officially ratified the authenticity of the university as a genuine Catholic institution of the Church. As a pontifical university, the institution must adhere to the dogmas and teachings of the Holy Roman Catholic Church as expressed by the Holy See and the Sacred Congregation for Catholic Education.

Market trends have led to significant curriculum development in the areas of technology and research, as evidenced by the inauguration of the School of Architecture (2009) and the Center for Teaching and Research in Biotechnology and Agro-Biotechnology (2011) and the creation of the IDL (Institute of Distance Learning) for online education courses and resources.

INSTITUTIONAL MISSION & VISION

Based on Ex Corde Ecclesiae, issued by Pope John Paul II as an apostolic constitution on Catholic higher education, and most recently on the documents produced in the Catholic Bishops Conference held in Brazil in 2007, “The mission of Pontifical Catholic University is to honor and promote the life and dignity of the human being as well as to educate him/her in accordance with the values of the Gospel and the disciplines of current scientific knowledge in order to build a better local and global community.” The method by which the University accomplishes the mission is “by means of a dynamic, critical, and creative educational encounter, framed around Christian amity and committed to the quest for answers and solutions to the issues of culture and to the challenges of the Puerto Rican, Caribbean, and global realities, within a peaceful and harmonious environment.”

In accordance with the mission, the vision of PCUPR is that it will be the primary option to achieve an integral Christian and academic formation of excellence aimed towards a life of fulfillment and adventure. The university will pursue this vision by integrating the following values in our educational encounter: faith and reason, Catholic life, family, integrity, community service, educational quality, and dialogue.

The University cultivates the distinctive disciplines according to their individual principles and methods, maintaining academic freedom in an open and honest dialogue with faith. In this manner, it aims to form righteous men and women with the capacity to assume responsibilities in society and to stand before the world as loyal witnesses of their faith.

ARCHITECTURE PROGRAM HISTORY

Early in 2007, Abel Mislá-Villalba and a small group of local professionals found themselves pondering amidst uncertainties brought forth by the economic, social, and political structures in Puerto Rico. Involved within the realms of the public and private sectors, as well as academia, discourses gave way to very innovative perspectives on the issues and the need to have a well-established, coordinated venue to further examine and implement these perspectives in a cohesive, creative and functional manner. It is in this particular setting that academia, in conjunction with public and private sector, proved to be a viable, objective and comprehensive platform for the study and implementation of strategies aimed at validating or re-thinking prevalent models, and in seeking new approaches at dealing with not only with the issues, but also their effects, detrimental or otherwise, on communities, urban settings, design culture and overall character of the social realm.

The creation of a new academic platform became an imminent mandate, parting from an innovative approach, but within an already established structure that could provide support, resources and a solid platform. The PCUPR, as the single largest academic institution in southern Puerto Rico, and with a complete academic offering and strategic alliances with both the public and private sectors, became that sought partner.

A proposal for the new School of Architecture was drafted by Mr. Mislá-Villalba, Javier De Jesús-Martínez, and Pedro A. Rosario-Torres (who in 2010 became the Program Director), and presented to Rafael Hernández-Colón, former Governor of Puerto Rico and member of the Board of Trustees of the PCUPR. Well known for his innovative political postures and proactive approach towards the urban realm, culture and the economical and political forces that drive them, through Mr. Hernández-Colón the proposal found its way to the Board of Trustees. Unanimously favored by all, an Implementation Committee was created to oversee and promote the proposed architecture program to fruition, chaired by the former Governor.

The Implementation Committee's first task was to commission a Feasibility Study. The study concluded that the proposal was not only economically feasible, but also a necessity within Puerto Rico's southern and western regions. Following the validation provided by the Feasibility Study, the proposal was then submitted and circulated among all institutional governances within the University, namely, Curriculum Committee, University Senate and Finances Committee, and was approved without major exceptions or amendments.

One of the most important and daunting tasks was finding a home for the architecture program. With the invaluable help of Mr. Hernández-Colón, Mr. Mislá-Villalba, and a group of dedicated architects and planners, an exhaustive search for the program's home ensued. Following the program's philosophy of establishing its operations within Ponce's urban fabric, the Historic Forteza building was finally selected and acquired by the University. The existing building proved ideal to accommodate the facilities, and its location proved even more dramatic and visionary than imagined. Nested along the perimeter of Ponce's Main Plaza, and within the Historic District, the Forteza Building was rescued from abandonment and given its proper respect, filling its promise of fortitude and timelessness. It was about that same time that the required documentation was drafted, organized and submitted to the Puerto Rico Higher Education Council (CESPR, for its Spanish acronym) for approval. Without comment or exception, approval from the Council was granted.

Extensive marketing and recruiting for the Program became the next top priority, all while the Forteza building was redesigned and rehabilitated. The island wide recruitment campaign yielded great feedback as to the Program's offering and, most importantly, provided the School with a myriad of candidates seeking admission. Following institutional protocols and processes, candidates were carefully screened, interviewed, and scrutinized for admission. The effort yielded 119 students ranging from new admissions and transfers, to post graduate level students pursuing new directions. On September 4th, 2009, as a preamble to the School of Architecture's formal inauguration, and marking the birth of the new Program, an Architecture Summit was organized. The event was titled *The Currency of Ideas: Forecasting New Climates for the Exchange of Cultural Capital* and included seven internationally renowned architects and educators.

With a technological platform second to none, and a vision deeply rooted in innovation and the practical implementation of technology, the PCUPR School of Architecture was officially inaugurated on September 14th, 2009. During its foundational year, the Program has opened dialogues between widespread disciplines through a well established experimental ecology, providing the groundwork for graduates capable of developing free enterprise, with capacity for professional and intellectual growth, and a vision beyond the stereotypes of the profession.

Academically, the transition from the first year to the second was made with an innovative Digital Design Summer Program, in which many of the School's active and accepted students integrated with high school students and undergraduates from other programs within the institution and other universities, to investigate the relations between industrial design and architecture. Officially, the second

academic year of the School began on August 16th, 2010, with a new class of 131 students, an even bigger group than the previous, proving the pertinence of the Program within the Region.

In September 2011, Abel Misla-Villalba stepped down as Founding Dean of the School of Architecture in pursuit of personal and professional endeavors that would prevent him from devoting his undivided attention to the program. At this time, the Associate Dean, Mr. De Jesús-Martínez, assumed the position of Interim Dean in January 2012. His leadership was characterized by advancing the research, multisectorial and entrepreneurial agenda of the School. During his tenure, the implementation of the research initiatives produced proposals such as Route 123: Agro-touristic Corridor (an initiative for the US Housing and Urbanism Department). He also worked on the development of alliances between the Program and respected companies like CEMEX, Grupo Carmelo, and AkzoNobel. To reinforce the research culture in the School, Mr. De Jesús-Martínez invited senior researcher Luz M. Rodríguez-López, Ph.D, to join the faculty. She also served as Associate Dean. Under the Interim Deanship of De Jesús-Martínez, the School formally completed its first curricular cycle, and with it, the first four graduates from the Program.

Late in 2014, Javier De Jesús-Martínez stepped down as Interim Dean, and the PCUPR engaged in the formal search and designation of a new Dean. In March 2015, Architect Luis V. Badillo-Lozano was officially designated to the position of Dean for the PCUPR School of Architecture.

The PCUPR School of Architecture enters a new era and academic cycle under the leadership of Architect Badillo-Lozano, who has an experience 15 years as Architecture Faculty, and 30 years as Partner of one of the most reputable architecture and engineering firms in Puerto Rico. From the School's inception, Badillo-Lozano has been Experimental Unit Coordinator and Faculty of the Sustainability and Technologies Unit. The new Dean is presently concentrated on:

- **Successfully complete the School's Initial Accreditation Process.**
- **Evaluation of the present nine Experimental Units** in search of more effective academic structure, avoiding redundancy, and pursuing a more streamlined administrative entity.
- **Evaluation of the Program requirements to reduce the present amount of credits.** At least two courses (7 credits) have been identified that can be eliminated. Also, on the next academic year the School will participate in a Curriculum Evaluation which should result in a leaner Program.

- **Strengthen the Capstone Experience.** Architect Badillo-Lozano has already created the position and designation of a Capstone Coordinator to refocus the last two Architectural Design Studios in the Program with the idea of promoting a more rational and comprehensive final curricular year experience.
- **Continuum support and reinforcement of the School's Research Culture.** Architect Badillo-Lozano has already created the position and designation of an experienced researcher as Research Coordinator and advisor of the younger researchers.
- **Establish a fixed location for the School's first Off-Campus Program, increase the international exchanges, and expose our students to a broader cultural diversity experience by adding academic alliances with both foreign and stateside Schools.** Architect Badillo-Lozano not only reiterates the School's support to the already existing alliances, but also is establishing a Memorandum of Understanding with the Catholic University Redemptories Mater in Managua, Nicaragua, which will become an abroad Historical Preservation Laboratory for our Program.
- **Turn the School in the Puerto Rico's South and West Regions Professional Continuum Education and Activities Centre.** Architect Badillo-Lozano has already agreed with the State's Architects Association (*Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico - CAAPPR*) an alliance for the School to become their Regional Chapter Headquarter.
- **Improve the presence and standing of the School within the community.** Architect Badillo-Lozano has already agreed to regularly contribute with articles regarding architectural subjects in local and island wide general publications newspapers and to encourage the participation of the School components in professional and civic organizations and/or initiatives.

ARCHITECTURE PROGRAM MISSION AND VISION

Through an interdisciplinary curricular structure, a unique digital platform complimentary to that structure, and a commitment to impact society constructively through a multi-sectorial institutional interaction, the School of Architecture envisions a creative process that transcends the conventional, and is rooted in a non-conformist attitude where the establishment is constantly tested and scrutinized in benefit of innovation and creativity.

The mission of the School of Architecture at the PCUPR is to forge a new strategic architect, planner, thinker and entrepreneur in an interdisciplinary environment;

one within which the understanding of the territorial and urban complexity, as well as the regional and global economic dynamics, can operate with advanced technologies and knowledge to guide sustainable investments and interventions.

The vision of the School of Architecture at the PCUPR is to transform the education of architecture promoting an academic ecosystem that values innovation, encourages multisectoral thinking, and operates from an advanced technological basis to undertake sustainable economic development in Puerto Rico's Southern Region, turning it into an urban model internationally.

The Architecture Program aims to educate a new Architect through an innovative ecology of experimentation and expansive knowledge. With an international agenda, unprecedented access to technology, and a profound social commitment with Puerto Rico's Southern Region, the PCUPR opened its doors within Ponce's historical urban center. The Strategic Architect the program pursues to form is a professional shaped by the substantive crossing between disciplines, with dominion of technologies and an understanding of the complexity of the territories and the cities.

The Program reaffirms the importance of leadership, self-guided discipline, and transcendental quality for the young professionals that search for their space in a very competitive professional arena. Graduates from the Baccalaureate Program shall be able to:

- Act in tune with the Christian values and principles that are proclaimed in the Pontifical Catholic University of Puerto Rico.
- Possess a higher sense of commitment and responsibility towards the practice of the profession, innovative, able and with a vision of the future.
- Acquire a business sense, willing to position themselves in a hierarchical position and have their voices be heard, highly active in the decision making process that affects the way natural and build environment is plan, manage and developed, the quality of life as a society and the capacity of innovative developments.
- Be aware of the realities of the exercise of the discipline.
- Have a better understanding of the confines and limits of the profession that can diversify the profession through interdisciplinary interaction, trans-disciplinary knowledge and multi-sectorial approach to open new avenues for success.
- Have the capacity to establish effective and proactive relations with all governmental, cultural, social, political and economic structures inherent in today's global society.

I.1.2.LEARNING CULTURE & SOCIAL EQUITY

LEARNING CULTURE

Institutional educational competencies and skills are aligned to the mission, vision and goals, and are reflected in the institutional learning outcomes. The eight competencies established by the institution as expected learning outcomes upon graduation are to:

- Demonstrate openness and religious knowledge as fostered by the Catholic Church.
- Employ critical thinking and creative techniques for solving problems.
- Apply effective communication skills to express ideas, opinions, and emotions in order to maintain interpersonal and collaborative relations effectively.
- Demonstrate respect for diversity of values, cultures, and points of view as well as tolerance for ambiguity and openness to change.
- Apply ethical principles to cultural and human responsibilities when confronting challenges in one's personal, family, community, and professional life.
- Utilize diverse qualitative and quantitative methods when confronting problems requiring the search for truth.
- Manage information and technology appropriately; employing conflict management skills.

Learning culture, as pertaining the School of Architecture's mission and vision, requires a cognitive paradigm that breaks the passive model of conductive education and reinforces vertical learning in a multidisciplinary manner. The program achieves this through the Experimental Unit paradigm. They formulate a new pedagogical synergy that guides the operational, academic, research, cultural and social trends of the education of architecture through a multisectoral and transdisciplinary platform rooted in cooperation and the exchange of information.

Knowledge not only occurs from the student-professor relationship; it is multidimensional to the effect that each member of our community is considered a source of knowledge, experience, wisdom and innovation. It is multidimensional because it considers society and the cities as laboratories, fields of action and destiny of our explorations and our new knowledge.

Such a system, although expansive by definition, still requires constraints and boundaries to make it a feasible solution to current academic models. These constraints cannot be solely academic in nature, but rather a combination of

theoretical and experiential conditions. The opening of the education system is guided by an ethic that leads to constructive relationships and links for a satisfactory interaction. The PCUPR School of Architecture's construct relies on:

- *Respect* towards the valuation of diversity as defined by territory and culture, as well as the public realm (property and environment) and the urban, architectural and landscape patrimony.
- *Dignity* towards work and the valuation of the person as the foundation of professional, academic and research resources for the accumulation of knowledge to better the quality of our spaces and environments, where all members of our community become role models for the discipline and collective execution is dignified in the formation of a healthy ecosystem for the greater good of society.
- *Prudence* in the valuation of the actions, investments, interventions, time and resources as essential to guarantee maximum performance and return. Guided by a vision of sustainability and responsible for the fair management of economic and physical resources, each member of our community must be held accountable for their actions without limiting the capacities and responsibilities of other individuals, of the community and themselves.
- *Solidarity* towards the needs and aspirations of each individual of our community to improve quality of life through education and common good. Solidarity is materialized in new cooperative ways of teaching, learning, investigating and promoting the development of knowledge.
- *Leadership and Social Commitment* to the cultural constructs and contributions of architecture, the strengthening of the spirit and the cultivation of imagination to promote innovation and influence architectural and urban culture on a global level.
- *Equanimity* in exercising critical judgment for the evaluation of performance to promote the paused and profound discussion of ideas in search of new knowledge on urbanism, architecture and landscape architecture.
- *Tolerance* towards other cultures and the exchange processes that enrich the social and intellectual capital of our community. The value towards locality should not replace the capacity of aperture and exchange of experiences, tendencies and efforts from other academics and professionals within and outside our local communities.
- *Promotion and Dissemination* of the individual, collective and multisectoral findings and research as a methodology of assuring community interest in the topics that really construct our social structures.

- *Cultivation of Imagination* as an open, interdisciplinary and multisectoral creative process, respecting the intellectual and creative property in search for common knowledge, and promoting the expansion of that knowledge as an imaginary exercise with real life applications.
- *Cooperation and Collaboration* as a social exercise in which the objectives are reached through the synchronizing of the strengths and improvement of the individual capacities in the execution of projects and research.

The PCUPR School of Architecture believes that a new Strategic Architect and leader shall emerge from an environment of unrestricted knowledge, but with an ethical postulate that allows interactions to occur in a manner worthy of our Institution, and to the community which it serves; an education environment in which human respect and ethical exchanges are the foundations of a trustful peer relation, and where the curriculum maps academic behavior to the benefit of the transdisciplinary exchange, catalyzing cross-pollination, and fertilizing innovation.

Within the walls of the School's Aula Magna, students, faculty and staff alike will find the principles by which the School's pedagogical structure was designed, and their responsibilities to encourage, through every action, a well rounded professional:

- with social and community commitment
- with environmental responsibility
- with tolerances for differences
- with entrepreneurial audacity
- with technological capacity
- with local awareness and global presence
- without prejudices or preconceptions: free thinkers and citizens of the world

The PCUPR facilitates and promotes a climate of respect for cultural and social diversity. Its mission statement recognizes that as an institution it is responsible for creating a better local and global community; and within its vision, it is committed to searching for solutions related to the cultural realities not only of Puerto Rico but that of the Caribbean and the world. This climate of respect is an effort evidenced by the academic and institutional organizations and offices that have been established.

SOCIAL EQUITY AND DIVERSITY POLICY

Since its foundation in 2009, and particularly since our last Accreditation Candidacy Visit (2013), there have been no complaints internal or external against our School of Architecture regarding equal employment opportunity or discrimination on the basis of any of the protected categories such as race, ethnicity, creed, national origin, gender, age, physical ability or sexual orientation. The PCUPR maintains an affirmative action employment program which is audited every year and which assess the recruitment process of all its Academic Units, including the School of Architecture. The PCUPR does not require any employee or candidate for employment (faculty or administrative) nor any student or student applicant, to disclose his or her sexual orientation.

Potential applicants for admission, administrative positions or faculty positions are considered based on qualifications. While provisions to 42 U.S. Code § 2000 (Section E-2) allow certain exceptions on hiring practices for religious based educational institutions when said institutions are “in whole or in substantial part, owned, supported, controlled, or managed by a particular religion or by a particular religious corporation, association, or society, or if the curriculum of such school, college, university, or other educational institution or institution of learning is directed toward the propagation of a particular religion.”, the Pontifical Catholic University of Puerto Rico is compromised with equal opportunity hiring practices and denounce “discrimination against any individual with respect to his/her compensation, terms, conditions, or privileges of employment, because of such individual’s race, color, religion, sex, or national origin”.

According to Section 2, Article 4, of 1990 “Ex Corde Ecclesiae” Apostholical Constitution by which the Pontifical Catholic University of Puerto Rico abides, “the responsibility for maintaining and strengthening the Catholic identity of the University rests primarily with the University itself. While this responsibility is entrusted principally to university authorities (including, when the positions exist, the Chancellor and/or a Board of Trustees or equivalent body), it is shared in varying degrees by all members of the university community, and therefore calls for the recruitment of adequate university personnel, especially teachers and administrators, who are both willing and able to promote that identity. The identity of a Catholic University is essentially linked to the quality of its teachers and to respect for Catholic doctrine. It is the responsibility of the competent Authority to watch over these two fundamental needs in accordance with what is indicated in Canon Law” (1990 *Ex Corde Ecclesiae*, Section 2, Article 4, § 1).

All faculty, administrators and staff, at the time of their appointment, are to be informed about the Catholic identity of the Institution and its implications, and

about their responsibility to promote, or at least to respect, that identity (*1990 Ex Corde Ecclesiae, Section 2, Article 4, § 2*). Those who belong to other Churches, ecclesial communities, or religions, as well as those who profess no religious belief, are to recognize and respect the distinctive Catholic identity of the University. In order not to endanger the Catholic identity of the University or Institute of Higher Studies, the number of non-Catholic teachers should not be allowed to constitute a majority within the Institution, which is and must remain Catholic (*1990 Ex Corde Ecclesiae, Section 2, Article 4, § 4*).

The PCUPR also recognizes and abides by the requirements of 41 CFR 60-300.5(a), agreeing to “take affirmative action to employ, advance in employment and otherwise treat qualified individuals without discrimination based on their status as a disabled veteran, recently separated veteran, other protected veteran, or Armed Forces service medal veteran in all employment practices”. Any and all processes regarding Veteran students and employees are managed through the PCUPR Office of Veterans Affairs.

Consistent with the institutional mission and goals, many services and strategies have been implemented to meet the needs of the diverse student body by providing support and guidance to traditional as well as non-traditional students who are older, have disabilities, are foreign, and partake in distance learning, among others.

The Institutional Office of Services with People with Dissabilities (OSPI for its Spanish acronym) formally began in 2001 with the objective to offer a favorable environment for the intellectual, physical, social, and psychological development of persons with disabilities. It recognizes the equality of and dignity of all human beings under the law. Since 2007, OSPI has provided services for an average of 136 students per year (*PCUPR Institutional Self-Study Report – MSCHE, February 2014*). The services are coordinated through the Vicepresidency of Student Affairs. The Program Director works with each individual case in coordination with OSPI and is responsible for providing students with disabilities all the services available in the Institution. The Institution has established the procedures that are offered to the students with disabilities, the guarantees to be addressed and may receive, according to ADA law and any other law, the reasonable accommodations according to their condition (*PCUPR Undergraduate Catalog 2011-2014*).

Reasonable accommodation practices and protocols for persons with disabilities require specific processes within the institution. Reasonable accommodation is defined by the PCUPR as an adjustment, adaptation or modification to the working or academic environment as required by a person with disability or special condition facilitate his/her participation and performance in work, instructional,

educational, mobility, living, recreational and services environments (Reasonable Accommodation as defined under Section 504 of the Rehabilitation Act).

OSPI reasonable accommodation processes require that students provide medical evidence of his/her special condition in the institutional office. After receiving said evidence, OSPI shall evaluate the evidence presented and generate a document, directed towards all faculty assigned to the student in the semester, where any and all reasonable accommodations shall be outlined. HIPPA rules shall preclude the document to include the nature of the special condition, just the reasonable accommodation required. Reasonable accommodation shall not alter course content or evaluation methods. Students with disabilities shall confront the same intellectual and academic requirements set forth by course syllabus.

OSPI has capabilities to provide technological assistance to persons with disabilities through specialized equipment such as:

- Chroma SVGA Image Amplifiers
- Reading Edge Xerox Imaging System)
- HOVRS—Hands on VRS
- Braille scanner/ printer
- Dedicated specialized workstations for the visually impaired
- Ergonomic mobiliary and equipment

The PCUPR also actively promotes women candidates for administrative and faculty positions to submit resumes and applications for hire when position are available. Departments requiring personnel submit the position requirements to the Human Resources Office for official analysis and subsequent postings. Academic departments submit the position requirements to the Vicepresidency of Academic Affairs. In both cases, once approved, an employment summons is drafted with all the position requirements and details. The official employment summons template includes the institutional policy on equal opportunity employment, and invites “all qualified women to submit”.

In terms of academic integrity, as stated in both our **Faculty and the Students’ Manuals** and also in the **2012 Intellectual Property Institutional Policy Manual**, the PCUPR has a clear policy and a long tradition of requiring from all its academic components the highest intellectual, ethical and moral standards regarding the respect and protection of the author’s rights. This includes among other, ideas, products, initiatives, activities documents and any other kind of material produced by others (people or institutions of any kind).

Our Intellectual Integrity Policies are clearly stated in the above mentioned documents and the PCUPR has no tolerance of any kind with regards to the violation of this policy. Among the Institution, committing an Intellectual Fraud Act of any sort is considered a legitimate cause for sanctions under a clearly defined Disciplinary Procedures.

I.1.3.RESPONSE TO THE FIVE PERSPECTIVES

INTRODUCTION

The PCUPR School of Architecture views the Five Perspectives as the genetic makeup of the holistic education of architecture. The Five Perspectives, in conjunction with the NAAB Student Performance Criteria and a working innovative paradigm, provided the basis for our interdisciplinary (within the School) and transdisciplinary (within the Institution) program. The School of Architecture strives to provide a platform for broad student and faculty experience. The School's approach to the "Five Perspectives" requires promoting active participation by both faculty and students through three main focus tracks: Academic Exploration, Curricular Amplitude, and Real-world Exposure.

ARCHITECTURAL EDUCATION AND THE ACADEMIC COMMUNITY

The curricular "ecosystem" formulated for the PCUPR School of Architecture promotes academic collaboration within two interwoven perspectives, the internal **interdisciplinary** approach, and the external **transdisciplinary** approach. The program engages interdisciplinarity from within by means of the Experimental Units.

ACRONYM	Nomenclature
ARAR	Architectural Representation
ARHT	History & Theory
ARAC	Adaptive Conservation & Preservation
ARST	Sustainability & Technologies
ARSF	Structural Framework & Assemblages
ARLE	Landscape, Ecology & Environment
ARUS	Urban Scapes & Communities
ARLA	Legal & Administrative Awareness
ARDA	Development Assesment, Entrepreneurship and Feasibility

Throughout the basic curricular experience, students are subjected to the progressively intertwined structure of the collaborative architectural process. The expertise required to effectively manage this inclusive array of academic wealth comes from a well rounded faculty composed of architects, historians, preservationists, engineers, landscape architects, urban planners, lawyers, developers, artists and experts in computational design and representation. Experimental Unit Coordinators, and faculty members within the Units, are encouraged to advance the collaborative process by engaging academic programs within the PCUPR or other institutions of higher learning through specialized research, academic collaborations, lectures, seminars, external conferences and focused activities (transdisciplinarity).

This cross-academic and transdisciplinary courses by which the required Minor Degree of specialization is achieved, allow students to expand their collaborative skills and knowledge outside of the traditional architecture boundaries and directly engage other academic departments within the university and specialized electives linked to the Experimental Unit structure.

Students are empowered to select, based on their area of interest, from a broader scope of knowledge through the pairing of the Experimental Unit offer (24 credits Minor Degree) requirements through an interdepartmental coordination in the following manner:

Experimental Unit	Institutional Affiliate
Architectural Representation (ARAR)	Fine Arts Department
History & Theory (ARHT)	History Department
Adaptive Conservation and Preservation (ARAC)	History Department
Sustainability & Technologies (ARST)	Environmental Sciences Department
Structural Framework and Assemblages (ARSF)	Physics/ Mathematics Department
Landscape, Ecology and Environment (ARLE)	Biology Department
Urban Scapes and Communities (ARUS)	Social Sciences Department
Legal & Administrative Awareness (ARLA)	Social Sciences Department
Development Assessment, Entrepreneurship and Feasibility (ARDA)	College of Business Administration

Directly related to the perspective of architectural education and the academic community, the School of Architecture has progressively and systematically expanded the quantity and quality of knowledge with lectures, conferences and seminars focused in academia, and the pursuit of expansive knowledge of the task of educating future architects.

- **Designing for Social Innovation Leadership (DSIL) 2014 Field Course**
Faculty member Mónica Sánchez-Sepúlveda travelled to Thailand and Cambodia to present research on the challenges and opportunities of urban realms due to the complexities of social, economic and political trends. November 2014.
- **Biotectónica**
An interdisciplinary academic collaboration and establishment of a digital platform between the PCURP School of Architecture and cienciaPR.org on the topic of biotectonic applications. April 2014.
- ***El hotel Caribe Hilton y la negociación ambivalente de imaginarios culturales (Caribe Hilton Hotel and the Ambivalent Negotiation of Cultural Imagery)***
Lecture by Ms. Luz M. Rodríguez-López held in Mexico City on topics of history and conservation. June 2013.

See section I.2.1 for additional lectures on this topic.

ARCHITECTURAL EDUCATION AND STUDENTS

Due to the uncertainties of present practice, the School of Architecture postulates that while the range and depth of the academic structure is integral to the forming of new architects, to shape a visionary and enterprising leader requires a pedagogical strategy that promotes the Exploration, the Experimentation and the Application of knowledge through the rigor of the fundamentals of architectural practice as well as the creation and development of alternative and complimentary markets. Exploration emphasizes on quantity and quality of knowledge in all relevant thematic areas within the School's interdisciplinary program. Experimentation builds upon exploration in the search for alternative postulates, variations and new creations. The Application seeks to develop an interest in pursuing new developments, projects or ideas. It is our philosophy that by exposing students to these opportunities we contribute to the development of leadership.

- **Pekakucha 20x20: 20 images, 20 seconds**
 Following the format created by Pechakucha.org, the student organization MAS organized the event where ten faculty members (Experimental Unit Coordinators) were challenged to present 20 images and elaborate on their meaning for 20 seconds each. Topics covered were representative of the various Experimental Units within the School. March 2015.
- **Startup Weekend at Ponce**
 A student team from the PCUPR School of Architecture were awarded second place at the Ponce Startup Weekend Charette (held at the Forteza Building) for the design, fabrication and marketing plan of Resight, a recycled wood eyewear company. August 2014.
- **DNR Internship Design Proposal Presentation**
 Students from the PCUPR School of Architecture presented conceptual projects for Bahía Mosquito (Mosquito Bay) in Vieques. January 2014.
- **Without a Trace Design Competition**
 Student Design competition. November 2013.

Another important dimension in the approximation of Architecture Education as pertaining to student development is exposure in the context of a global culture and the diversity of thoughts on a regional and global scale.

- **2015 CLEA Annual Meeting**
 LINEA, PCUPR Chapter of CLEA (Coordinadora Latinoamericana de Estudiantes de Arquitectura) competed for, organized and hosted the organizations Annual Consultive Meeting in Ponce. Student delegates from 10 central/southamerican countries and the United States attended the week long event. February 2015.
- **Park[ing] Day 2014**
 Student event (worldwide) for the adoption of urban parking spaces. September 2014.
- **11th Latinamerican Architecture Students Social Workshop**
 PCUPR Chapter of CLEA (Coordinadora Latinoamericana de Estudiantes de Arquitectura). Students travel to Nicaragua to engage latin-american architecture students abroad. April 2014.
- **Collaborative Studio: PCUPR School of Architecture & SUNY College of Enviromental Science and Forestry**
 Short term design project for the revitalization of the main square of Castaner, a rural historic township. April 2014.
- **La ruta de la cal (In the Path of Lime)**
 Student trip to Cartagena de Indias, Colombia. March 2014.

- **Park[ing] Day 2013**

Student event (worldwide) for the adoption of urban parking spaces. September 2013.

For the purpose of strengthen and shape the student body itinerary of activities, the School has four Student Organizations with different agendas:

- MAS (*Movimiento de Arquitectura Social*) was the first organization to charter within the school, and it is not affiliated with any other local or international student group. It was started in 2011, and was officially recognized by the Institution in 2012. It focuses more on the social and academic aspects of architecture.
- The School's AIAS chapter began in 2013. It is structured and administered according to the rules of the national AIAS, and focuses on the practice of architecture (professional) and the academic realm.
- LINEA (*Liga Nacional de Estudiantes de Arquitectura*) is the School's local chapter of CLEA (*Coordinadora Latinoamericana de Estudiantes de Arquitectura*), an international organization of latin american architecture students. It has chapters in many South and Central American countries, as well as three recognized chapters in the mainland USA within schools of particularly notable *latino* student bodies. LINEA was officially created in late 2013, and has had enormous success in providing students with exposure abroad.
- During the fall of 2014, another group of students with very specific interests created the PCUPR School of Architecture USGBC Student Group. It has quickly become a very vocal and active group within the School and in our community. During the months of March and April 2015, the group organized training for faculty, students and other professionals interested in pursuing LEED examination and certification.

ARCHITECTURAL EDUCATION AND THE REGULATORY ENVIRONMENT

In the field of regulatory development and implementation, the Legal and Administrative Awareness Experimental Unit (ARLA) provides students with one of the primary sources of information and collaborations through the implementation of courses, lectures, special projects, and strategic alliances with local, state and federal agencies responsible for the regulatory environment to which most graduates will eventually be subjected to in professional practice, be it in the private or public sector. The ARLA Experimental Unit also provides students with the understanding and framework provided under professional agencies such as CAAPPR (*Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico*) and

Puerto Rico State Board of Examiners of Architects and Landscape Architects, of which both acting Presidents are or have been included within the School's faculty since 2009.

Graduates from our Program shall also have an awareness of regulatory practices within other fields of expertise via interventions with other Experimental Units. They shall have awareness on issues such as: preservation and conservation, building codes and regulations, public policy, land use, development, and energy efficiency, as well as systems of incentives in place by government agencies to promote issues not yet in regulatory status. These tools, along with the skills acquired in the design realm, allow the students to acquire tangible expertise within the fields and themes brought forth through the Experimental Unit proposed as integral components of the Program (*See section 1.2.1 for lectures on this topic*).

ARCHITECTURAL EDUCATION AND THE PROFESSION

The School of Architecture's goal is to engage its context through ideas and resolution of issues at a global scale while dealing with those that are most pressing on the local realm. The idea behind this is to keep student exploration nested in reality without compromising the possibility for innovation and prepare students for their insertion into a local network of professional with an innovative perspective.

To that effort, and as the pre-eminent initiative for the inclusion of students within the realities of professional practice, the School has instituted and appointed the Intern Development Program (IDP) Education Coordinator (Architect Pilarín Ferrer-Viscasillas) as required by NCARB and NAAB. Although the initiative was formally instituted in 2010, new requirements of the IDP 2.0 version required reformulation and update to the faculty, as mentors, and students, as program participants. The IDP program in the PCUPR School of Architecture aims to:

- Hold different and separate orientation meetings related to education and promotion of IDP 2.0 with students and faculty.
- Hold meetings to include student leaders and student organizations.
- Train administrative personnel in the handling of terms and basic tools of IDP 2.0 so that they can support the program and the School's IDP Education Coordinator.
- Invite regional practicing architects who can shed light on the importance of this Program and the "essential role" they have in its successful implementation.

- Follow up on individual basis on all those interested students to facilitate their entrance into the Program.

Student enrollment and participation in IDP has grown substantially in the past two years. Enrollment is now over 20% of the entire student population, and many are actively registering experience within the IDP modules through collaboration and extracurricular office experience.

The PCUPR School of Architecture proactively pursues and sponsors lectures related to the practice of architecture. The IDP Education Coordinator continuously throughout the academic year presents seminars on IDP guidelines and student registrations. See section 1.2.1 for additional examples of activities that embark on the perspective of architectural education and the profession from traditional to contemporary views, as well as student engagement in professional environments:

In March of 2015, the CAAPPR, a lawfully chartered and required professional entity for Architects and Landscape Architects in Puerto Rico, announced that a second location would be added to serve architecture and landscape architecture professionals in the southern and western regions of Puerto Rico. The PCUPR School of Architecture was chosen as the home base for CAAPPR, thus providing immediate and close support to professionals in this area. This close proximity also allows students to engage professional practice at an early stage prior to internship and professional licensure.

ARCHITECTURAL EDUCATION AND THE PUBLIC GOOD

The 2013 Visiting Team Report expressed “The school aspires to achieve regional emplatthy and landscapes of common good as the backbone of its academic, social, cultural and economic proposal for the southern region of Puerto Rico. By directly connecting to the region and city of Ponce, the school promotes the symbiotic relationships between public service, being a good citizen, and being a good architect.”

"We must be willing to use the benefits of our industrial, technical and scientific advances not only for the intellectually determined ends but also for man's social and spiritual development so that he/she may obtain through his creative efforts the signification and dignity of man/women expressing himself with joyous and religious fervor through his/her art. ART, as an organic part of life, at the root of being". Henry Klumb

The PCUPR Operational Plan for the period of 2014-2020 is expanding its reach on the topic of public good in the form of voluntary work included within several general education courses. The entire student body of the School of Architecture is required to take these courses.

The School of Architecture's involvement in public good and the community stems from the mission of the PCUPR. "To honor and promote life and dignity of the human being, as individuals and within a community" is viewed as a necessity rather than a possibility. While public good is engrained within the institutional mission, the School actively engages it through Memorandums of Understanding and initiatives geared towards active academic involvement and partnerships on the matter.

Notable among the collaborative initiatives aimed at common good is the proposed *Route 123 Agro-tourism Corridor*. This project is a multi-sectorial initiative with PathStone Communities, the Conservation Trust of Puerto Rico and the Center for New Economy, and is co-financed by the U.S. Housing and Urbanism Department (HUD) through a competitive proposal that was submitted by the consortium through a proposal request by the Rural Innovation Fund. The Route 123 initiative implements planning, economic development, housing, entrepreneurship and self-management to revitalize and refurbish the productivity and competitiveness of cultural, physical, natural, commercial and industrial assets between the communities of Ponce, Adjuntas and Castañer. The proposed Route 123: Agro-tourism Corridor initiative was conceived in partnership with the Landscape Ecology and Environment Experimental Unit, thus providing economic revenues from the proposal, and in-studio development for the benefit of the student body. As part of the initiative, other groups like Casa Pueblo and the Center for Landscape Conservation have joined as additional resources.

The School has also developed an official partnership with Casa Pueblo, a non-profit environmental watchdog community-based organization in Adjuntas, Puerto Rico. The organization has a radio station, with environmental and cultural programming and opened an environmental school in August 2013. Under the name *Bosque Escuela La Olimpia*, it provides environmental education to the local rural communities of central Puerto Rico, as well as more urban communities interested in environmental issues. The PCUPR School of Architecture has partnered with this organization in many aspects; most notably, student involvement in the design and construction of exhibits and educational installations in the *Bosque Escuela La Olimpia*.

Regular lectures and other community involvements include:

- **Bosque Escuela La Olimpia**
Architecture students, under a Memorandum of Understanding between the PCUPR School of Architecture and Casa Pueblo, Inc., participated in the design and installation of two educational exhibits/classrooms at the Bosque Olimpia School. June 2014.
- ***Ponce abre sus puertas (Ponce Opens its Doors)***
Public “open-door” tours of historical Ponce buildings and homes. Hosted and led by PCUPR Architecture faculty and students. April 2014.
- **Visit to Enlace Caño Martín Peña Project**
Guided visit to 2010 EPA Natinal Achievement in Environmental Justice award honoree. March 2014.

While many initiatives relating to public good come from the academic realm, and in many cases informally, the PCUPR School of Architecture reinforces and structures the public good perspective through the **International Relations, Development and Community Outreach Coordinator**. The IRDC Coordinator is directly responsible for seeking, coordinating, structuring and assessing many of the initiatives, Memorandums of Understanding, and projects involving the School of Architecture and the community.

The IRDC Coordinator is currently working on a new MOU regarding the School of Architecture and the Rafael Hernández-Colón Library Foundation. The understanding will provide direct access for faculty and students to the Library’s archives focused on Puerto Rico’s political history and documents.

See section I.2.1 for additional lectures on this topic.

I.1.4.LONG RANGE PLANNING

Strategic planning in the PCUPR School of Architecture is based on alignment between the Institutional Operational Plan and the mission and vision within the School. The Institutional Long Range Plan collects an operational matrix where goals, objectives, strategies and activities are delineated for five-year periods, and are aligned within eight (8) priority areas:

- Integration of Faith and Life
- Attention to the Needs of Students
- Curricular Revision
- Human Resources
- Technological Infrastructure
- Physical Infrastructure

- Administration and Finances
- Research Culture

The PCUPR School of Architecture complements the Institutional Long Range Plan with departmental specific activities, resources, time-lines and indicators (both qualitative and quantitative) as required for achieving success in the the priority areas established by the Institution.

Most priority areas of the Institutional Operation Plan can be readily aligned with most of the five perspectives. Objectives within the “Integration of Faith” priority level establish the basis for the School’s perspective on public good. The same relationship can be assessed with the “attention to the needs of students” priority level and the “curricular revision and actualization” priority level, both of which are directly traceable to the academic and student perspectives within NAAB.

All long range planning to the benefit of the perspectives relative to regulatory and professional realms are handled directly within the School. These perspectives are not fully developed institutionally due to the fact that most other departments within the institution do not yield professional degrees.

A copy of the latest Institutional Long Range Plan and the School of Architecture’s goals, objectives, strategies and activities are available upon request, and will be included within the Team Room for the Initial Accreditation visit.

I.1.5.PROGRAM SELF ASSESMENT

PROGRESS TOWARDS ITS MISSION

Among the most prominent statements of our School’s Mission, are the proclamations that we pursue to *“to educate and forge a new strategic architect, planner, thinker and entrepreneur in an interdisciplinary environment”* and also *“The School of Architecture at the Pontifical Catholic University of Puerto Rico aims to educate a new Architect [...] With an international agenda, unprecedented access to technology, and a profound social compromise with Puerto Rico’s Southern Region.”*

We feel confident to affirm that since the last NAAB visit our Program is progressing steadily toward a pedagogical environment created by the students, faculty and administrators that promotes the advancement of practical and theoretical knowledge of architecture integrating along the educational training process, those aspects and/or disciplines that we identified as essential skills for the XXI Century Strategic Architect that we are seeking to have as graduate. Our

Program is committed to propagate knowledge of built and virtual environments in both urban and open landscape contexts, always procuring to influence our society in adopting sustainability values.

Now with our Program in place and with the achievement of having graduated our first and second cohorts, we are witnessing the interaction of the various Experimental Units and their interdisciplinary and multisectoral contribution in the training of our students, producing a unique Alumni Profile, *“one with understanding of the territorial and urban complexity, as well as the regional and global economic dynamics, that can operate with advanced technologies and knowledge to guide sustainable investments and interventions.”*

Throughout these years the School has exposed and capacitated both students and faculty in all the fields of knowledge and expertise in areas that intervene in the sustainable planning and development of our built context. Our curriculum has proven to be a visionary undergraduate proposal that integrates each field of study with inherence in our professional practice.

PROGRESS AGAINST MULTI-YEAR OBJECTIVES

As stated in our 2013 APR, *“the goal of the PCUPR School of Architecture’s academic platform is to offer a high standard, all-encompassing education that can bring real solutions to real problems affecting our communities and our region. Attention shall be given to the integration of the student body within the community’s social, cultural, political, economic realms, bringing forth a formative process guided by intellectual quality, integrity, and compromise where the real necessities of the community are met with innovation in a skillful, multidimensional manner.”*

With this mandate as the cornerstone of the School’s holistic approach, the integration of the Experimental Unit components to the Program have proven to be an innovative and integral part of the School’s success. Since the foundation of the School in 2009, our Goals have remained constant, all of them clearly evolving from the topics of interest assigned to Experimental Units. The challenges are clearly defined, and the progress has been positive and steady as we briefly described below:

- **Architectural Representation Experimental Unit (ARAR), the Basic Connector for the Program**

We have identified this Experimental Unit as the one which by definition occurs every semester during the Program. Having this in mind, we have identified it as an opportunity and delineated some

strategies in order to turn it in a Curricular Academic Vertical Connection tool. As part of the revisions proposed to our curriculum and pursuing the previously mentioned goal, starting this next semester (fall 2015) we are implementing fundamental modifications to most of the ARAR courses (mainly 101, 301, 401, 420) responding to the above mentioned strategies, procuring a better alignment with Design Studios' (ARAD) needs and also responding to two other aspirations of our curricular revision: 1) provide our students with a wider variety of digital options, and 2) reinforce our Capstone Year (ARAD 410 & 420).

○ **Capstone Year Experience**

In fall 2012 our former Interim Dean, Mr. Javier De Jesús-Martínez, designated a Faculty Committee, presided by the then Experimental Unit Coordinator now our current Dean Architect Luis V. Badillo-Lozano, to articulate our Capstone Courses. From the beginning the final curricular year was conceptualized as a single experience consisting on ARAD 410/Research and Conceptual Design + ARAD 420/Development and Presentation of a Final Design Solution Proposal. Since then, we have been implementing the Committee's Proposal until this last semester when Dean Badillo created the position of Capstone Coordinator to supervise the implementation of the all strategies agreed for this final curricular year.

This next semester (fall 2015) all the original recommendations will be in place, which are (among others):

1. By the end of ARAD 402 students must present an abstract of the topic that they are selecting for their Capstone Year for evaluation, comments and approval of a Faculty Evaluation Committee.
2. By the end of ARAD 410 the students must present, in addition to the written research document, a schematic of their design proposal (in the past an only a rough concept was required).
3. ARAR 420 time will be dedicated to working on the design solution and not to develop digital graphic skills. The rationale behind this change is that by the end of each student career, after having taken nine (9) ARAR Courses, these students are deft in digital representation tools and their limited time in their last semester is more productive if they dedicate those ARAR Friday hours to continue working on their projects. We understand that this additional supervised time will contribute

to ending with a more mature, better resolved Capstone Project.

4. With the idea to reinforce the vertical connection of our Program, the Midterm and the Final Juries will be integrated by faculty members representing all of the Experimental Units, preferably having the Experimental Unit Coordinators.

- **Research Culture**

Since the last NAAB visit, and complying with one of the PCUPR priorities, our School has been decidedly supporting research initiatives with the intention to strengthen the Research Culture of our Program. This has been happening by the implementation of four different initiatives. These are:

1. We have created the position of Researchers Coordinator occupied by a Senior Researcher who is in charge of mentoring and guiding younger researchers that needs some support in identifying funds, grants, and also in establishing adequate systems and research methods.
2. We grant research supporting contracts in which we compensate the some of our researchers so they can dedicate that time to their investigation without having to prepare for an academic course.
3. We are identifying funds out from our School's operational budget and allocating them as "Seed Money" to sponsor and stimulate some of the faculty's research initiatives coordinated through the Experimental Units, such as PONCE MATERIA, FAADS (Factors Affecting Architectural Design Solutions), REIL (Research, Entrepreneurship and Innovation Laboratory), among others.
4. Through the creation of Elective Courses, or using IDP credits as compensation, we stimulate our students to participate as assistants in research projects.

- **International Agenda**

In our Program we clearly understand the benefits of comparison and of being exposed to different visions, ways and ideas, as result of healthy exchanges with other National and Foreign Institutions. Our track record demonstrates our unquestionable support to international academic initiatives. By now, we are honored to count among our partners with prestigious Institutions both from USA and Latin America such as:

1. College of Environmental Science Forestry, State University of New York
2. DePaul University , Chicago
3. Florida International University
4. Hunter College, City University of New York
5. Pontifical Catholic University of Chile
6. Pontifical Catholic University of Rio Grande do Sul, Brazil
7. Pontificia Universidad Católica Madre y Maestra, Dominican Republic
8. Universidad Iberoamericana (UNIBE), Dominican Republic
9. Universidad Jorge Tadeo Lozano, Colombia

Last semester our International Agenda experimented significant progress, since we are advancing in the process of establishing our first “Off-Campus Fixed Location” in Nicaragua, thanks to the Strategic Alliance with Universidad Católica Redemptoris Mater (UNICA), which consists in expanding the possibilities of our students to have an extended stay international experience in a foreign country, but under our own academic offering. Together with UNICA, we are working with the goal of turning this into a reality by spring or no later than fall 2016. This next semester (fall 2015), as a soft opening, we are offering ARAC 402, an Historic Preservation Elective Course, which includes a 10 days research trip to Nicaragua, sponsored by UNICA.

○ **Integration to the Community**

One of our School’s most solid attributes is our strong ties with the community since our first inception, six years ago. We have moved up from a new and almost unknown Institution with the youngest program of architecture in Puerto Rico, to a well-recognized, well integrated member of the Community. Our School is committed to service the people of Ponce and Puerto Rico through engagement in projects of tangible and lasting value to the communities. During the last few years our School has been able to provide design assistance to municipalities of the South and West Coasts of the Island by participating in conceptual proposals for municipal projects, allowing our students to have a hands-on design experience dealing with real clients, real design situations in towns such as (among others):

1. Adjuntas
2. Aguas Buenas

3. Lares
4. Mayagüez
5. Ponce
6. Sabana Grande
7. San Germán

Simultaneously, our School has been able to build strong ties with local Civic Institutions, counting among our allies:

1. AARP Puerto Rico
2. Casa Pueblo
3. Coalición de Coaliciones Pro Personas Sin Hogar
4. Desarrollo Integral del Sur
5. Fundación Biblioteca Rafael Hernández Colón
6. Patronato Castillo Serrallés
7. Sociedad de Educación y Rehabilitación de Puerto Rico
8. Southern Chamber of Commerce of Puerto Rico

Finally, we are also proud of being able to reinforce our relationship with the Profession. This past semester of spring 2015 we signed a mutual cooperation agreement with the CAAPPR (*Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico*). Locally, the CAAPPR is the largest and most important professional architects association in Puerto Rico and, different from the AIA, it is not voluntary but a law mandated membership. Until just three months ago the CAAPPR did not count with facilities out of San Juan, but now under the present alliance our School has become the CAAPPR headquarters for the South and West Regions of Puerto Rico.

In addition, this past semester (spring 2015) we were also certified as a Continuing Education Provider for the professional community, designation that is allowing us to stablish an even stronger ties and more visible presence in within the architecture community.

SCHOOL STRENGTHS

By means of a reflexive analysis about our program, we can establish the following strengths:

- Strong moral and ethical principles
- Clearly defined vision of our local, national and regional role

- Unique and innovative academic proposal, offering nine different and professionally relevant concentration topics (Experimental Units)
- Strong backing from the central administration of the University
- “State of the Art” digital and virtual representation platform
- Private and comfortable Library with a growing select collection
- Unique location in Ponce’s Historic District
- Strong community ties (professional, civic and academic sectors)
- Positive perception from the public
- Friendly and open relationship between all academic community components (faculty, students and administration)
- Diverse academic background and professional profiles from our faculty, contributing to a fluid and dynamic pedagogical offer
- Enthused and diverse student body
- Enthusiastic participation of our students in local, international and national organizations
- Highly relevant lecture series
- Dynamic international agenda
- Growing and decisively sponsored research culture
- Faculty active in regional public debates

SCHOOL CHALLENGES

By means of a reflexive analysis about our program, we can establish the following challenges:

- Revert the reduction in new students’ enrollment due to Puerto Rico’s present economic situation
- Articulate a sound strategy for a revision of our curriculum in search of reducing the total amount of credits without impacting negatively the concept of our academic proposal
- Achieve a program “vertical” academic integration
- Expanding our zone of influence beyond the Southern and Western Regions of Puerto Rico (attract student candidates from beyond these regions)

SCHOOL OPPORTUNITIES

By means of a reflexive analysis about our program, we can establish the following opportunities:

- Consciously consider increasing the diversity within our faculty and our student body

- Approach USA *Latino*/Hispanic Communities' student candidates, so as to become an alternative for those who are considering studying abroad
- Increase our value within the professional community as a Continuing Education Provider, reinforcing our role as the top regional destination for professional architectural organizations activities
- Assume a pivotal role among the community as a cultural and intellectual municipal destination
- Maintain and improve our present international academic strategic alliances
- Complete and expand our international agenda projects, particularly those related with the "Off-Campus Fixed Location"
- Keep reinforcing and complete the new approach of the Capstone Year Experience and to the new sequence of the Architectural Representation courses Digital Courses
- Turn research into a true School's Culture
- Keep expanding our digital offer and maintain our position as a top technological destination
- Use our Experimental Units Coordinators faculty as a strong resource for both lectures and workshops open to the professional and general public
- Better promote our lecture series and use this opportunity to turn our School in the main Continuing Education Provider of the Region
- Launch a School's periodical publication to reach a broader academic, professional and general public
- Encourage our faculty and students to participate in local and international competitions
- Intensify our effort for a better dissemination of our School's academic work
- Reinforce the regulatory professional aspects of our practice
- Work for an adequate balance between young and "gray hair" faculty
- Invite foreign or graduates from foreign universities to become part of our faculty in order to avoid a cultural inbreeding
- Insist in including more frequently visiting critics as members of our design studios juries
- Maintain and reinforce our relationship with School's alumni; visualize and include them as a reachable prime academic resource

SELF ASSESSMENT

As part of the institutional structure of the PCUPR, each Academic Program is evaluated by the Institutional Assessment Office (OAI, for its Spanish acronym).

This office includes the Data and Support Recollection Center (CADA, for its Spanish acronym) which works with the data and information recollection and analysis processes generated during the implementation of the academic assessment plans. Also, it advises the members of the assessment committees of the academic units and it services the processes with review, preparation or modification of the assessment instruments.

The OAI was established to promote the leadership and the support in the development and supervision of the effectiveness of the institutional assessment model. It provides support for the continuous bettering of all the areas of the university's community through educational activities and orientation of the assessment and accreditation requirements, amongst others. Also, as a live and academic service community committed with the full realization of the human being in all its dimensions, the institutional assessment project promotes the development and complete fulfillment of the students.

The Program Director of the PCUPR School of Architecture, in key with the requirements of the OAI, is a member of the Institutional Assessment Committee (CAI, for its Spanish acronym) as a representative for the Program. As a foundation for the execution of its functions, this board refers to the Guide for the Assessment of Academic Units provided by the institution, including the following themes:

- Institutional Assessment Project (PAI, for its Spanish acronym)
- Academic Assessment Process
- Student Apprenticeship Assessment
- Role of the Institutional Assessment Office and the Institutional Assessment Committee
- Role of the Units Assessment Committees
- Functions of the Unit Assessment Committee's President
- Implementation of the Unit's Assessment Plan
- General steps to guide the Assessment Process
- How to prepare the Unit's Assessment Plan
- Compile the data and sharing the results: interpreting the evidences and implementing the changes and the improvements
- Utilize the nourishment to make changes
- Procedure for form developing
- Instruments for the assessment of courses
- Instruments for the assessment of academic programs
- Other instruments for the assessment of academic progress

To ensure the fulfillment of the mission established for the program, and in its pursuit of academic, administrative and professional excellence, the School relies profoundly on student assessment of the Program and the Facilities. For this purpose, the School established **Form 10-ARQ** as a yearly evaluation questionnaire submitted to the students during the spring semester to provide insight on the operations, and serving as the promoter of reinforcement or bettering for future administrative actions. The implementation of the document was approved by the OAI and established as part of the Program's assessment policy. The form was designed to allow congruence with the requirements established by the NAAB to respond to the Five Perspectives.

The instructions for the questionnaire provides students with a confidential venue for expression, and the instructions included with it ask for a responsible, objective and sincere assessment in a scale of five levels (0=Does not Apply, 1=Fail, 2=Poor, 3=Satisfactory, 4=Good, 5=Excellent). The questionnaire includes forty (40) questions and/or statements divided into eight main categories. Students were asked to evaluate the Program in the following areas:

1. Academic Offering : Students are asked to evaluate
 - a. The integration of technology within the academic structure.
 - b. The utilization of alternative teaching methodologies.
 - c. The diversity of the academic offering.
 - d. The integration of a multidisciplinary structure.
 - e. The studio culture and environment.
2. NAAB's five perspectives: Students are asked to evaluate
 - a. The program's ability to integrate student participation in the development of an inclusive Academic Community.
 - b. The program's ability to provide an academic structure for students to become leaders in both academic and professional settings.
 - c. The program's ability to provide an academic structure for students to engage regulatory environments in both academic and professional settings.
 - d. The program's ability to provide an academic structure for students to engage the roles and responsibilities required for professional practice.
 - e. The program's ability to provide an academic structure that promotes social involvement and the profession's impact on common good of humanity.

3. Administrative Structure and Operations: Students are asked to evaluate
 - a. The program's administrative leadership as promoters of the School's vision.
 - b. The administrative personnel's professional demeanor as applicable for daily operations.
 - c. The administrative personnel's disposition for managing and tending to student issues.
 - d. The administrative personnel's ability to manage student issues in an individual and private scenario.
 - e. The administrative personnel's diligence and speed in resolving or tending of issues brought forth by individual or collective students.
4. Activities and Events: Students are asked to evaluate
 - a. The quantity of academic events and activities provided.
 - b. The quality and relevance of academic events and activities provided.
 - c. The multidisciplinary diversity of the events and activities in keeping with the School's vision and mission.
 - d. The cultural and social dimension of the events and activities.
 - e. The relevance of the activities and events with regards to the student's academic and professional preparation.
5. Facilities: Students are asked to evaluate
 - a. The School's facilities as pertaining to academic needs of the student body.
 - b. The School's schedule of operations.
 - c. The School's security and safety structure.
 - d. The School's maintenance personnel, schedule, operations and general demeanor of the facilities.
 - e. The availability of maintenance and security personnel as required by students and/or faculty.
6. Library and Information Resources: Students are asked to evaluate
 - a. The library's schedule of operations.
 - b. The availability and demeanor of Library personnel.
 - c. The quantity, relevance and availability of primary Library resources (books, collections, etc.).
 - d. The quantity, relevance and availability of supplementary Library resources (magazines, journals, etc.).
 - e. The library's atmosphere in terms of illumination, comfort, sound control, and cleanliness.

7. Multimedia and Data Network: Students are asked to evaluate
 - a. The center's schedule of operations.
 - b. The availability and attention provided by personnel.
 - c. The professional capacity of the personnel in solving network and computer issues.
 - d. The variety and relevance of the hardware and software provided.
 - e. The cost of printing, copying and plotting.
8. Fabrication Laboratory: Students are asked to evaluate
 - a. The Laboratory's schedule of operations.
 - b. The availability and attention provided by personnel.
 - c. The professional capacities of the personnel in helping students achieve their work.
 - d. The variety and relevance of the hardware and software provided.
 - e. The cost of using specialized equipment (laser cutters, 3d printers, Compute Numerical Control routers, etc.)

As for the faculty, to measure their fulfillment, the School utilizes the Apprenticeship Assessment Techniques Manual, provided by the OAI, and the Faculty Evaluation by Program Director, a document provided by the Vice Presidency for Academic Affairs (VPAA). Also, the Program has implemented a faculty assessment project conducted by the students with the use of **Form 5** (Faculty Evaluation by Students). This is also an institutional evaluation document required for Full-time and Part-time faculty by the VPAA. The following are the 21 topics in which the students assess the performance of the faculty:

1. Encouragement towards achieving the institutional mission.
2. Professionalism in the execution of duties and responsibilities.
3. Respect demonstrated towards students.
4. Utilization of the course syllabus for the accomplishment of the course objectives.
5. Knowledge of the material taught.
6. Organized presentation of learning materials.
7. Diversity of teaching strategies.
8. Clarity in the communications of ideas.
9. Encouragement towards critical and analytical thinking.
10. Opportunity to ask questions and clarify doubts.
11. Effectiveness towards promoting student participation in class.
12. Utilization of appropriate and updated bibliographical and technological resources.

13. Anticipated preparation.
14. Effectiveness in the utilization of the course contact hours.
15. Diversity of evaluation methods.
16. Clarity of the criteria for evaluation.
17. Clarity and precision in the writing of exam questions.
18. Promptness towards the notification of grades (a maximum of two weeks from the examination).
19. Impartiality towards grading, utilizing the criteria as established in the course syllabus.
20. Availability to attend students' academic needs.
21. Regularity and punctuality.

The inclusion of additional topics and/or questions responds to institutional revisions of self-assessment procedures, curricular revisions, and recommendations from accreditation agencies.

ASSESSMENT RESULTS

A high quality college education is the goal of all institutions of higher education. To achieve this goal, universities must assess their academic, student and administrative services. For this extent, the Pontifical Catholic University of Puerto Rico has established its Strategic Plan. In this document, the Vision of the Priority Area #2, Attention to the Needs of the Student Body, states the following:

“Recognizing that students are the focus of the University, all expectations to achieve comprehensive quality training and obtain a degree from the institution, within a reasonable time, will be met through effort, collaboration and commitment of all university bodies.”

Achieving the following institutional goals and objectives will contribute to the stated vision:

- Increase retention of students enrolled, by effectively addressing their needs.
- Establish streamlined administrative processes to meet the needs of students.
- Determine the level of satisfaction of our students with the educational and administrative operations of the institution.

It is in terms of determining the level of satisfaction of our students that the School has administered its questionnaires obtaining the following results per the presented topic:

Academic Environment	Agree	Disagree	Neutral
The academic environment is conducive to learning.	76.13%	3.60%	20.27%
Academic Environment - Most satisfaction	Agree	Disagree	Neutral
Academic counselors help identify the means and resources with which achieve educational, personal and career goals.	93.75%	0.00%	6.25%
Faculty provides an educational environment that facilitates learning.	87.50%	0.00%	12.50%
Faculty demonstrates mastery of the courses they teach.	87.50%	0.00%	12.50%
Academic Environment - Less satisfaction	Agree	Disagree	Neutral
Extracurricular activities contribute to students' personal and professional development.	62.50%	6.25%	31.25%
Faculty provides guidance on selecting courses for enrollment.	62.50%	18.75%	18.75%
Faculty uses different methods to assess learning.	62.50%	6.25%	31.25%

Diverse areas (including main campus)	Agree	Disagree	Neutral	Not used
Student Services	57.89%	6.61%	20.41%	15.09%
Physical Facilities	46.96%	7.29%	26.31%	19.44%
Activities	45.24%	7.14%	27.38%	20.24%
Communication and Information Services	56.07%	14.02%	17.20%	12.71%
Academic Services	61.80%	5.62%	18.73%	13.85%
Support Services for Teaching	37.23%	4.79%	33.34%	24.64%

As for the teaching in the academic program, since its foundation year the students have been given the task of evaluating their faculty through the use of Form 5 (previously mentioned). The global results per academic year, using a 0 to 100 average scale (100 being the highest), are as follows:

Academic Year	Courses Evaluated	Average
2009-2010	18	83.71%
2010-2011	43	83.02%
2011-2012	52	84.47%
2012-2013	56	88.27%
2013-2014	31	86.98%
2014-2015	78	88.15%
Totals	266	85.07%

In term of the graduates' assessments, the Institutional Alumni Office handles the administration of surveys and questionnaires. A survey to be administered to our graduates was scheduled for the month of May.

INSTITUTIONAL REQUIREMENTS FOR SELF-ASSESSMENT

The PCUPR has established very methodical self-assessment processes for the evaluation of its curriculum and faculty. The Institutional Curriculum Committee, composed by the Provost, high-level academic administrators and Deans, leads the efforts toward constructing better academic offerings and constantly reviews existing programs. On the other hand, the Vice Presidency for Academic Affairs (VPAA), as part of its extensive duties, is in charge of evaluating the complete teaching staff of the institution, including the faculty of the School of Architecture.

For the faculty assessment, safeguarding the personal dimension that characterize the individual teaching practice of each professor, the VPAA has always emphasized in the necessity of addressing the institutional mission, vision, pedagogical model, educational philosophy, organization, and curriculum as an integral component of each course. As with any complex procedure, it is founded on principles that contribute the basis for the Institutional Process for Faculty Assessment. The following is a list of the founding principles:

- The assessment must be a complete and continuous process in the entire University.
- For it to be complete, all members of the institutional community must participate: students, faculty and administration staff.
- For it to be continuous, it has to be done periodically. The assessment process will be completed annually.
- The fundamental purpose of the faculty assessment is to promote improvement and professional growth of the entire teaching staff in all of their academic areas.
- The assessment is the instrumental process for institutional decisions of: contract renovations, promotions, tenures, and other personal benefits.
- The faculty assessment must be founded on an institutional setting of trust and confidence.
- The assessment must be sincere, honest, respectful, and producer of commitment, change and improvement in the teaching strategies.
- The critical self-assessment is an essential component in the process for it to succeed.

- All the information related to the assessment process (procedures, forms, and results) must be accessible to the faculty.

The Institutional Process for Faculty Assessment includes the utilization of diverse instruments of evaluation. These documents facilitate the gathering of information and relevant observations on the academic, professional, and administrative tasks of each member of the teaching staff.

LONG-RANGE PLANNING INFORMED BY SELF-ASSESSMENT

To ensure the fulfillment of the mission established for the program and to measure the student's efficiency, the Program carries out a periodic Academic Progress Assessment Report referred to the Institutional Finances Committee, the Bursar's Office and the Economic Assistance Office. This report aims to collect and project numerical data of the entire student body that makes up the enrollment of Bachelor of Architecture Program. The purpose is to frame the management direction initiatives and projects to be implemented for the subsequent years, ensuring the perennial continuity of triumphs at institutional level.

Lastly, to ensure the fulfillment of the mission established for the program, the Administration of the School of Architecture has implemented a structured system of weekly meetings for the constant evaluation of the student body and the academic personnel. Also, the long-range planning process, including the establishment of the budget for subsequent academic periods proposed each year to the Vice Presidency for Finances and Administration, is a participative activity including all the components within the School.

I.2. RESOURCES

I.2.1. HUMAN RESOURCES AND HUMAN RESOURCE DEVELOPMENT

FACULTY & STAFF

Interdisciplinary dialogue and multi-sectorial knowledge are the conceptual basis for the curricular ecosystem of the PCUPR School of Architecture. The School offers an academic integration of diverse branches of knowledge that impinge on design and planning, expanding from the micro towards the macro. This innovative program is the alternative to the weathered academic models that base their offer on the disciplinary separations and ruptures focusing almost exclusively on the pure architectural perspective over holistic exploration, experimentation and implementation. It is an offer designed to provide our graduates the most

complete education and possibilities for social contributions and bettering of our cities and territories.

The PCUPR School of Architecture's curricular structure is subdivided into nine inter-dependent Experimental Units of operation. Each Experimental Unit provides the ideal platform to promote the discussion and the critical analysis of the architectural postures presented on each topic. Each Experimental Unit is integrated to one of the existing Schools and/or programs of the institution, developing even more the interdisciplinary character of the Architecture Program and providing the benefit of complementing our curriculum with feasible interdepartmental collaborations and Minor Degree requirements.

For these reasons, professionals with thorough theoretical and practical knowledge of the topics have been appointed to head each of these Experimental Units and facilitate the concepts and new progressive tendencies of their areas of expertise. Along the progression of the curriculum, each student is provided by these professionals with the necessary guidance to obtain a clear definition of each field of specialty. The following is a list of the Coordinators:

- Mr. Alejandro Mieses-Castellanos – Architectural Representation
- Ms. Magda Bardina-García – Adaptive Conservation and Preservation
- Ms. Pilarín Ferrer-Viscasillas – Sustainability and Technologies
- Mr. José R. Pagán-Parés – Structural Framework and Assemblages
- Ms. Tamara Orozco-Rebozo – Landscape, Ecology and Environment
- Mr. Javier Bonnín-Orozco – Urban Scapes and Communities
- Mr. Joel Montalvo-Bonilla – Legal and Administrative Awareness
- Ms. Lorna Báez-Amely – Development Assessment, Entrepreneurship and Feasibility
- Mr. Luis Ayala-Rubio – Capstone Year Experience
- Mr. Agamemnon G. Pantel-Tekakis, PhD – Researchers Coordinator

The procedures related to the recruitment, selection, and appointment of full and part-time faculty at the PCUPR Ponce Campus and its extensions are found in the Statutes, Faculty Manual, and other documents approved by the Board of Trustees and the University Senate. The authority to appoint faculty resides in the President, who delegates this power to the Vice-President for Academic Affairs. The Associate Vice-President for Academic Affairs, who logs Equal Employment Opportunity and Affirmative Action data, initially acknowledges all applications received. These applications are then sent to the corresponding Program or Department Director, which compares the candidate's academic experience and background with departmental needs. According to established norms, the Director consults a departmental committee of faculty members with rank

concerning the candidates who will be recommended for the teaching position. In addition to academic preparation, emphasis is also given to the moral and ethical principles inherent in the candidates whose qualifications are reviewed by the Delegate for the Institutional Mission. Deans receive recommendations from the Program or Department Directors and forward them with their approval to the Vice-President for Academic Affairs.

Promotion and tenure policies are stated in the Faculty Manual and are based on the requirements of academic degree, academic excellence, and fulfillment of duties as well as years of service. The PCUPR rank designations for full time faculty are as follows (from lower to higher): Instructor, Assistant Professor, Associate Professor and Professor. Each full-time faculty member with academic rank may be considered for tenure at the beginning of his/her twelfth year of active service in the university. Faculty involvement in the revision of rank and tenure policies and procedures occurs in the University Senate. Presently, the Rank and Tenure Committee of the University Senate is involved in gathering data through a faculty survey regarding the possible revision of these policies.

Faculty members from different colleges and departments have been actively involved in the curricular revision process initiated by the Institutional Commission for Curriculum Revision. A specific three-year project supported by a grant from the U.S. Department of Education and the Fund for Post Secondary Improvement (FIPSE) has given faculty the opportunity to further improve the teaching/learning encounter. This project includes the integration of constructivist principles, assessment, and technology to teaching strategies, enabling the university to move towards a more student-centered environment in which technology serves to further enhance the educational encounter.

Presently (at the moment we are working on this APR) our School does not have any faculty member dedicated exclusively (100%) to instructional duties, except for our Librarian which is considered a Full time Faculty. In addition to her, our Program Director, who is also full time, divides his time 60% for administrative work and the remaining balance of 40% is dedicated to instructional duties. Our former Associate Dean, Luz M. Rodríguez-López, Ph.D., is also a full time Faculty who also divides her time 60% for administrative and 40% for instructional duties.

By the time of the NAAB Initial Accreditation Visit next semester (Fall 2015) we are forecasting the inclusion of our first full time faculty member who will be assigned exclusively to academic responsibilities.

In terms of part time faculty, they are strategically recruited relative to the Experimental Unit structure. Candidates are scrutinized based on the curricular

needs, as well as expertise and experience within the specific requirements of the Experimental Units. Recommendations are then submitted to the Dean for further scrutiny.

All Experimental Units within the School of Architecture's are presently active and at different stages of development. Faculty rosters are reviewed every semester depending on the courses slated to occur in the subsequent semester. The matrix and resumes provided present a snapshot for the academic background, professional qualifications, and assignments from the fall of 2013 to the spring 2015.

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Faculty development, both academically and professionally, occurs through constant exposure to the School's inter-disciplinary character and collaborations, as well as Program promoted conferences, lectures, seminars, continued education, and special academic projects. Most of the academic development activities within the School are materialized through Professional Services contracts for external resources and lecturers. Most of these activities, while academic in nature, also provide the professional benefit of continued education credits. Funding for external development (not within the PCUPR School of Architecture) is available every semester and included within each fiscal budget petition through Travel and Professional Advancement accounts. Some of these external development opportunities include seminars, continued education, conferences, collaborations and special academic projects.

VISITING LECTURERS

The following is a list of visiting lecturers brought to the School since the previous NAAB visit:

- **The Importance of a Multidisciplinary Design Approach in Fostering a Sustainable Future**
Speakers: Ricardo Rodríguez and Ryan McEnroe (AIA, Washington DC). April 2015.
- **Bridge Aesthetics Around the World**
Speaker: Fernando Fagundo, PE, PhD. Lecture on the aesthetics of historical and contemporary bridges. April 2015.
- **All Over the Place**
Speaker: Eduardo Bermúdez, AIA. Lecture on the relationship of architecture and photography. April 2015.
- **House or Home: The Homeless Condition**
Speaker: Francisco J. Rodríguez (Director of *Coalición de Coaliciones Pro Personas Sin Hogar*). Interdisciplinary/public conversatory on the topic of homelessness from urban, architectural, theological and public policy standpoints. October 2014.
- **Design Thinking Workshop**
Speaker: Dana Montenegro (co-founder of SeriouslyCreative). October 2014.
- **FIIC 2014: Cultural and Creative Industries as Catalysts of Economic Development**
Speakers: Alejandro Castañé, Ana Carla Fonseca, Félix Manito and Jorge Melguizo. The forum provided faculty, students and the community the benefits of native-design and social entrepreneurship. September 2014.

- **1st Forum for the Development of Brownfields**
Speaker: David Southgate (DISUR). Forum for the community on brownfield development initiatives, alternatives, cleaning and financing. May 2014.
- **Landscape Forms: Projects in development**
Speaker: Efraín Vélez (Senior Designer, Landscape Forms). Design philosophy and project presentation. April 2014.
- **Integrated Permits System and Act 151-2013, PR Permits Reform Act Law**
Speaker: Alberto Lastra (Executive Director of the Puerto Rico Permit Management Office). Lecture on Puerto Rico's new Electronic Permitting System and its implications in construction and project management. April 2014.
- ***Convergencias: Lo bello y lo justo de la arquitectura (Convergences: Beauty and Fairness in Architecture)***
Speaker: Alberto Pérez-Gómez (McGill University). Lecture on the convergences of aesthetics and ethics in architecture. March 2014.
- **John Hejduk: Through the Wall**
Speaker: David Gersten (The Cooper Union). Lecture on the Works and philosophy of John Hejduk. February 2014.
- **Architecture, Design and Basic Concepts of Intellectual Property Law**
Speaker: Carla Ferrari, Esq. Lecture on the relationship between architectural design, contract documents and intellectual property/copyright. February 2014.
- ***Leer la ciudad: Jornadas de urbanismo, periodismo y literatura (To Read the City: Sessions on Planning, Journalism and Literature)***
Speaker: María Caballero-Wangüemert, PhD (University of Seville). Interdisciplinary academic roundtables on urban issues and culture. February 2014.
- **Senate Bill 769, to ammend the Puerto Rico Permit Reform Act**
Speaker: Alberto Lastra (Executive Director of the Puerto Rico Permit Management Office). November 2013.
- **Gluck+: Architect-led Design Build**
Speaker: Peter Gluck (Gluck + Architects). Lecture on the work of Peter Gluck and the advantages of architect-led Design-Build. October 2013.
- **Without a Trace**
Speaker: Vincent Pieri (Pieri + Associates Architects). Lecture on green architecture, sustainable design and collaborative service. October, 2013.

- **Smart Cities Challenges**
Speaker: Pablo Sánchez-Chillón (Eolexcitylab). Lecture presenting examples of the implementation of projects for smart cities and disruptive urban solutions, September 2013.
- **Act 173 and the Practice of Architecture in Puerto Rico**
Speaker: Raúl Rivera-Ortiz (Chairman of the Puerto Rico Board of Examiners of Architects and Landscape Architects). September 2013.
- **Senate Bill #655: Public Policy on Creative Industries**
Speaker: José Nadal-Power (PR Senate). Lecture and dialogue on Puerto Rico's law to promote creative industries. September 2013.
- **Raspacunlaude**
Speaker: Jonathan Ocasio (MarAzul Events). The motivational speaker and comedian presented a dynamic message that conveyed our students the importance of being unique, creative, leaders and, above all, better human beings. August 2013.
- **The Matrix Thnking Concept**
Speaker: Roger La Salle (La Salle Matrix Thinking). The Engineer and renowned expert on innovation shared his inventive process to identify potential opportunities and marketing strategies. June 2013.
- **Occupy: Architecture in the City**
Speaker: Jonathan Marvel (Rogers Marvel Architects). Lecture and dialogue on the underlying tension between public and private space. April 2013.
- ***Diálogo de Autogestión (Entrepreneurship Dialogue)***
Speaker: Diálogo de Autogestión Económica (Non-political/non-profit thinktank). Lecture and dialogue regarding the topic of entrepreneurship in professional realms. February 2013.
- ***Hacia una arquitectura de solidaridad (Towards an Architecture of Solidarity)***
Speaker: Edwin Quiles, Architect/Planner (University of Puerto Rico). Lecture and dialogue on the merits and theory behind community based design initiatives. February 2013.
- ***Ciclo de Vivencias Empresariales (Entrepreneurship Experiences Cycle)***
Speaker: Adam Sietz (Big Hug Productions). Lecture created to provide entrepreneurship insight and a discussion forum between academic faculty and students as an introduction to subsequent activities on this topic. January 2013.

VISITING CRITICS

The following is a list of visiting critics brought to the School since the previous NAAB visit:

- Fernando Abruña, PhD, FAIA
- Yadira Adorno, AIA
- Eduardo Bermúdez, AIA
- Silvia Álvarez-Curbelo, PhD
- Miguel Calzada, AIA
- Rafael Castro, AIA
- Maricarmen Conaway, AIA
- Yara M. Colón, PhD
- Laura Cordero, AIA
- Manuel De Lemos, AIA
- Beatriz Del Cueto, FAIA
- Astrid Díaz, AIA
- Peter Gluck
- Ryan McEnroe, AIA
- Andrés Mignucci, FAIA
- Vincent Pieri, AIA
- Emmanuel Ramírez, AIA
- Ricardo Rodríguez-De Santiago, AIA Associate
- Aníbal Sepúlveda, PhD
- Benjamín Vargas, FAIA
- José F. Vázquez, AIA

PUBLIC EXHIBITIONS

The following is a list of public exhibitions brought to the School since the previous NAAB visit:

- **Capstone Projects Exhibition 2014**
Exhibition of the projects recognized in the 2014 Capstone Year Projects Competition sponsored by the CAAPPR. March 2015.
- **BOOM: Design Creativity and Innovation Fair**
Exhibition of ideas and projects for architecture and industrial design. February 2015.
- **Mini Makers Faire**
Exhibition of innovative fabrication technology projects. January 2015.

- **POWER Fair**
Exhibition of projects, technologies and appliances for sustainable energy solutions. November 2014.
- **BOOM: Design Creativity and Innovation Fair**
Exhibition of ideas and projects for architecture and industrial design. November 2013.
- **Bio-inspired Architecture for Natural Events / Hurricanes and Safe House Expo**
A showing of projects that minimize the effect natural phenomena may have on buildings and structures, July 2013.
- **2nd Art and Design Fair**
The PCUPR School of Architecture participated in this event that convened more than 50 local artists and designers, May 2013.
- **Internacional Launch of MINI**
The PCUPR School of Architecture became the headquarters for the international launch of the new model of the auto company MINI, February 2013.

STUDENTS

Admission to the PCUPR Architecture Program starts at the institutional level. General admission requirements are scrutinized by the Admissions Office and relayed to the School of Architecture once the basic requirements have been met. The School receives referrals and coordinates live interviews for the prospective students. The interview process includes other requirements such as an essay and letters of recommendation; although portfolios are not required, students are encouraged to bring any material they may deem proper to better expose their skills and interests. Once the requirements are met, all scoring yielding from the interview and other academic background data is collected and a rubric is applied. Final decisions regarding entrance into the Program relies on the Admissions Committee, constituted by the Dean, Associate Dean, Program Director and Administrative and Academic personnel.

Admission and placement within the Architecture Program is also dependent on the type of applicant being reviewed. Any student who has obtained a high school diploma and/or that who has attempted less than twenty-four (24) credits at a higher education accredited institution is considered a New Student. Applicants with twenty-four credits or more from an accredited higher education institution will be considered Transfer Students. Applicants who have obtained a university degree (bachelor or higher) from a higher education duly accredited institution will be considered Graduate students. Applicants who have previously attended the Pontifical Catholic University of Puerto Rico will be considered Re-admission

students. This is applicable to students applying for a change of major and for those who have completed a professional degree and wish to pursue studies with a new degree.

The Dean of the School of Architecture will evaluate all transfer and new admissions applications with approved university credits to determine the courses that can be accredited. All general courses and major related courses approved with a grade of C or greater, which the Dean understands are equivalent or could or that could substitute one or several of the requisites of our institution. Courses will not be eligible for accreditation if more than ten years have passed since they were taken.

The Dean will determine the exact number of credits required for the degree. Nonetheless, the last thirty-six (36) credits required for the completion of the degree shall be undertaken at the PCUPR. The Dean will determine which of those shall be requisites form the program or the specialty. Some courses taken at other institutions that do not have an equivalent at the PCUPR could be accounted for as electives, subject to the Dean's approval. Any student could, before enrollment, submit a written appeal at the Vicepresident of Academic Affairs to reconsider any accreditation of transfer credits.

Student development is measured within three main perspectives: Interdisciplinary (performance within the Experimental Unit structure and curriculum), Leadership (collaborations, associations and entrepreneurship), and Exposure (social, cultural, economic and professional participation). The School of Architecture is committed to the development of its students in all of these dimensions.

Within the greater scope of the institution, students have the liberty to express, individually or collectively, their opinions concerning institutional policy or any other matter of general interest for the student body. The Student Senate was created to promote and acknowledge student representation within the higher ranks and policy making groups in the University. A student is appointed by the de jure members of the Board of Trustees to represent the student body on the Board. Each college will elect a student senator following the norms established by the university. Student representatives with voice and vote will form part of departmental committees which deal directly with academic affairs. In order to exercise the right of free expression, whether individually or collectively, the students can elect a Student Council whose responsibilities and privileges are stated in the Code of Student Conduct.

Within the PCUPR School of Architecture, students are represented through the four official student organizations: MAS (Movimiento de Arquitectura Social), AIAS (American Institute of Architecture Students), USGBC Students, and LINEA (Liga Nacional de Estudiantes de Arquitectura). While the latter is a national organization, both groups have representation within School governance as de jure members. Both groups are also immersed in promoting and developing the leadership, academic, social and cultural skills of the student body within the parameters of their individual mission, vision and objectives.

Christian education proposes the complete and harmonic development of the human being so that he/she becomes an authentic Christian. However, it emphasizes that the physical, intellectual, personal, social, and spiritual growth should go hand in hand if he/she is to gain a well-rounded education. Pontifical Catholic University of Puerto Rico highlights intellectual development and formal learning through education.

GUIDANCE CENTER

The Guidance and Orientation Center, adjoined to the Vice-Presidency for Student Affairs, is part of the services offered by PCUPR to all students as a complement to formal academic instruction. The guidance and orientation program with its multiple resources helps the student to adapt to university life. Additionally, it seeks to fulfill the needs and develop the potential of students in personal, vocational, occupational, and academic aspects.

First year students receive group orientation for one hour weekly during their first year of university studies (Orientation 003 and Orientation 004). Transfer students receive group orientation for one semester (Orientation 005), which should preferably be taken on arrival at the University. These orientation courses are prerequisites for graduation. The Guidance and Orientation Center also offers courses to students in the Institutional Honors Program. Among these are Leadership I (Orientation 009), Voluntary Community Service (Orientation 010), and Preparation for Graduate Studies (Orientation 011).

Personal Services provided include:

- Group and individual orientation according to existing needs of our students.
- Conferences and workshops on topics of personal improvement.
- Referrals to psychologists, social workers, residences, chaplaincy, vocational rehabilitation, Interdisciplinary Clinic for Services to the Community, etc.

- Planning of extracurricular activities that promote development of leadership skills on campus and in the community.
- Consultation offered to the student organizations associated with the Orientation Center.
- Consultation in the publication of the “College Review”.

In the academic area:

- Referrals to tutoring and academic counseling.
- Group orientations on: graduate studies, study and reading habits, effective time administration, techniques for test taking and preparation of oral reports, academic programs of PUCPR, Internet registration procedures.
- Interview and follow-up of students with poor academic averages.
- Referrals to deans, directors, and professors.
- Follow-up and retention strategies for students not registered in orientation classes or who do not process their registration during the period established by the institution.
- Orientation and distribution of applications for entrance examinations for graduate studies such as EXADEP, GRE, GMAT, TOEFL, and others.

In the occupational area:

- Individual interviews in cases of vocational indecision.
- Administration and interpretation of vocational interest tests.
- Individual and group orientations on themes related to job seeking.
- Orientation on existing employment opportunities according to the academic offerings of the university.
- Planning of Job Fairs.

Other services:

- Participation in the registration process for new students.
- Orientations to persons in the community.
- Work on departmental and institutional committees.
- Services to special populations: foreign students, athletes, students with limitations, transfer students, Institutional Honors Program students, and students on probation.
- Conferences requested by the community.

EMPLOYMENT SERVICES OFFICE

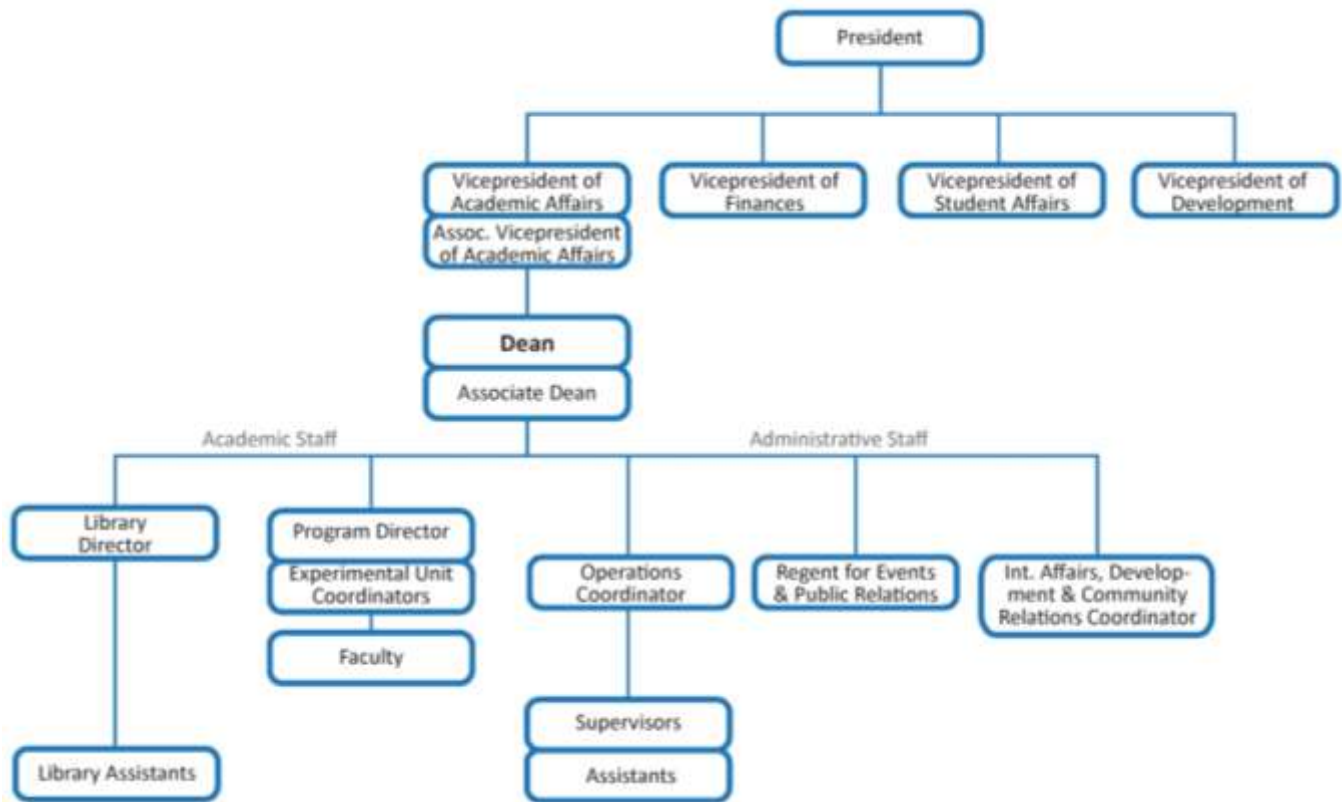
Employment Service Office for students is a special Project of the Labor Department and the Right to Work Administration. Its main objective is to help students in seeking, obtaining, and retaining employment. Its fundamental purpose is referral and job placement of students about to graduate. It also provides occupational information and provides jobs to students who need and want to work during their free time.

This service provides employers with an additional source for recruitment of personnel who have been technically and professionally trained in the areas of greatest demand. The officials of the program in different institutions allow the employer to locate trained personnel rapidly. The office becomes the link between employers and students seeking employment. In addition, the office coordinates orientation activities with the Orientation Center on occupational opportunities and job fairs and, the Ponce community.

I.2.2.ADMINISTRATIVE STRUCTURE AND GOVERNANCE

The PCUPR School of Architecture was developed with the same sovereignty as a College within the institutional framework of the PCUPR. It is not considered a department within another college. Its highest ranking official, the Dean, is responsible for the administration and management of the program according to institutional policy, mission and vision. The Dean responds to the Vice-President of Academic Affairs, the President of the University, and the Board of Trustees. The Associate Dean and the Baccalaureate Program Director, together with other administrative Coordinators, Assistants and Experimental Unit Coordinators serve as support structure to the Dean.

The following is the organigram of the PCUPR School of Architecture:



With the highest rank, administratively and academically, within the Program, the **Dean** possesses the designation and responsibility to lead the administration and the faculty within the PCUPR School of Architecture. The Dean's agenda includes, but is not limited to:

- Supervising all academic, executive, administrative, institutional, and community activities generated as part of the School under his charge.
- Evaluating and promoting the progress and development towards the fulfillment of the Schools pre-established mission, vision and objectives.
- Carrying out promotional events for the School, clearly outlining the integration strategies with the community, the region and the pertinent agencies and organizations, within the social, economical, political and cultural operative framework of the Program.
- Promoting and organizing departmental participation in the process of establishing strategies for regional economic, professional, social and cultural development.

- Coordinating the processes towards the School's regional and national professional accreditation.

With the second highest administrative and academic rank within the PCUPR School of Architecture, the **Associate Dean** provides leadership to the administration as:

- Assistant to the Dean in the organization of the duties pertinent to other School administrators within their roles.
- Intermediary and first contact between the Dean and the administrative team of Experimental Units Coordinators for the organization of diverse investigations and strategic planning.
- Supervisor and Manager for the development and implementation of all the special programs created by the Experimental Units within the School's academic framework.
- Supervisor of all administrative, academic, promotional, and professional links between the School, the University, and the community, with the purpose of expanding alliances.
- Counselor to faculty and administrative staff regarding academic assessment, curriculum, accreditation and other institutional protocols.

Note: Presently the Associate Dean position is not only vacant but also inactive.

As a high ranking officer within the School's academic system, the **Baccalaureate Program Director** is responsible for:

- Supervising, implementing and maintaining the highest level of academic excellence and competitiveness within the School's curriculum and other academic affairs.
- Serving as intermediary and first contact between the Dean and the faculty members of the Academic Program.
- Implementing and maintaining the School's vision and mission within the faculty, administrative, and student bodies.
- Communicating and promoting the achievement of the goals established for the School's academic system through homogeneous strategies within a diversified faculty setting.
- Implementing and maintaining a continuous and logical curricular revision policy to ensure an academic offering of the highest quality and competitiveness at a regional, national and global scale.

The **Library Director** shall be in charge of supervising, managing, promoting and coordinating all services provided within the library in benefit of students, faculty and the community. His or her responsibilities include:

- Keeping the CARIBET Library resources and processes current, organized and available to students and faculty at all times.
- Coordinating and providing effective access to information and architectural resources, both physically and electronic, helping and facilitating researches.
- Managing the distribution and organization of information resources.
- Developing and managing documents directly related to curricular topics and other aspects of the study and practice of Architecture, as embodied in the School's mission and vision.
- Developing and managing internal publications and the effective diffusion of information to the benefit of students, faculty, administrative personnel, and the community.
- Providing support for activities within the School's calendar.

With an administrative role of managing operational issues within the School, and direct support to the Dean and Assistant Dean, the **Operations Coordinator** is responsible for:

- Managing the School's operational framework serving the permitting and licensing issues with organizations and agencies.
- Managing the tasks performed by other administrative staff within the School's organizational structure.
- Managing and serving as a liaison between the School and the Institution regarding matters of contractual agreements and documentation for staff and consultants.
- Coordinating and supervising the allocation and use of the spatial resources of the School, according to the needs of faculty, students and guests.
- Attending operational situations brought to consideration by students, faculty or staff, referring it to the corresponding institutional Department.

With an administrative role of supporting the academic platform within the School from a human resources standpoint, the **Regent for Academic Affairs** is responsible for:

- Supporting the process of academic documentation for the School's accreditation by local, state and federal entities as required.

- Supporting the curricular revision processes and policies.
- Coordinating the institutional inscription of new courses, protocols and policies, as required by the School and/or the Institution.
- Supporting the preparation of academic reports as required by the Institution.
- Serving as administrative support in the process of compilation of documentation for recently appointed personnel.

Note: The duties of the Regent for Academic Affairs are presently contained within the responsibilities of the Operations Coordinator.

With an administrative role of supporting the operations of the School, the **International Relations, Development and Community Outreach Coordinator** shall perform duties including, but not limited to:

- Coordinate and promote academic research through external funding proposal.
- Coordinate activities such as seminars that promote innovative skills.
- Coordinate a calendar of seminars related to public policy and development for the academic community.
- Coordinate and facilitate collaborative agreements between the School and Public and Private sectors.
- Promote and sell the School internationally in order to recruit international students.
- Create and supervise study abroad programs and abroad internships for students.

With an administrative role of supporting the student body of the School with retention strategies of promotions, events, and exhibitions, the **Regent for Events and Public Relations** is responsible for:

- Preparing marketing and informational material for recruitment, student retention, and public relations as appropriate.
- Coordinating the Lecture Series, Special Activities, and other events related to the School, including all operations regarding guest speakers and conferences.
- Coordinating the School's yearly activities calendar.
- Coordinating with other Regents to successfully manage and implement activities that promote the academic and administrative development of students, faculty, administrative staff and the community.

- Managing information and coordinating the currency of the School's web interface, pertaining internal promotion of events.
- Serve as liaison between student organizations and the School's administrative structure.

With an administrative role of supporting the operations of the School, the **Administrative Assistant** shall perform duties including, but not limited to:

- Assisting the Dean in all matters of communications, calendar, reports, filing, coordinations and activities.
- Supervising and managing attendance records and payroll procedures of all personnel, reporting it to the Dean and the correspondent institutional department.
- Managing resources, supplies, invoices, requisitions, and other documentation directly related to the School's internal and external structures.
- Supervising and managing external resources like consultants, contractors, and temporary personnel as related to facilities duties and activities.
- Supervising and managing the use and disposition of utilities and other resources related to facilities operations.
- Work with the Operations Coordinator on the daily activities and the submission of periodic financial reports.

With a critical administrative role in the upkeep of the School's infrastructure and the everyday functioning of utilities and services, the **Facilities Supervisor** shall be responsible for:

- Supervising, managing and coordinating the effective everyday operation of facilities and grounds.
- Supervising and managing the cleanliness and upkeep of facilities.
- Coordinating with other staff members to prepare facilities for special events and the ongoing use of spaces for academic purposes.
- Establishing and managing protocols and norms for the use and disposition of the Schools facilities by students, faculty and staff.
- Supervising and coordinating the upgrade and necessary reparations of facilities related to the School.
- Managing external consultants, contractors, and services in matters of facilities and grounds.

As an expert in computer networks, computer hardware, software and print media, the **IT and Multimedia Supervisor** shall provide expertise and support in

the areas of networking, computer systems, communications and multimedia. The minimum academic requirements for holding this administrative position shall be Bachelor in Computer Science or Bachelor in Information Systems from a recognized and accredited College or University, and a minimum one (1) year of experience in related work. The Supervisor shall be responsible for:

- Providing a stable, efficient, and operational computer network for students, faculty, and administrative personnel.
- Updating and upgrading all software and hardware as to maintain a stable and efficient technical infrastructure.
- Providing technical support for all needs of the PCUPR School of Architecture, including students, faculty, staff and visitors.
- Establishing and managing protocols and norms for the use and disposition of computer networks and equipment.
- Managing and coordinating all print media as related to the PCUPR School of Architecture.
- Managing and coordinating the use of other digital technologies within the School, as well as counseling the administration on current and future technologies that could further facilitate user interaction and representation.
- Coordinating with the institutional IT department for update and upgrade of equipment, systems, communications, and security of the School's technological infrastructure.
- Provide administrative support to the PCUPR School of Architecture as it pertains to the communication and technological infrastructure.
- Supervise and coordinate tasks for employees and work-study participants assigned to the Multimedia Laboratory.
- Coordinating the maintenance, operation, upgrade and/or update of equipment and software as required for optimal functioning of the School's technological infrastructure.
- Coordinating the upkeep and general state of the facilities within the IT and Multimedia Laboratory.
- Coordinate periodic inventory of equipment, tools, materials and supplies.
- Coordinate the purchase of new equipment, tools, materials and supplies.
- Coordinate the protocols and processes for the payment of services and equipment use for students, faculty and possible external parties as required.
- Recommend and coordinate purchase of new equipment, materials and tools as required, as well as decommissioning of outdated or damaged equipment.

- Provide administrative support to the PCUPR School of Architecture as it pertains to the operation within the general administrative structure.

The **Computer Assistant** shall work under the direct supervision of the IT and Multimedia Supervisor. The minimum academic requirement for holding the position is an Associate Degree or Technical Degree in Computer Science or Information Systems from a recognized University or College, as well as basic knowledge of digital and graphic design software and three (3) or more months of related experience. The Computer Assistant shall be responsible for:

- Providing students and faculty with technical orientations and support regarding the safe and appropriate use of technological equipment and workstations.
- Provide support in maintaining a high level of security for users.
- Providing support in tasks related to general maintenance, inventory, upkeep, and installation of hardware and software.
- Provide support for administrative duties regarding equipment lending, movement, maintenance and decommissioning.
- Provide support for any administrative task as required by the Laboratory Supervisor.

As an expert in design, manufacturing and fabrication, the **Fabrication Laboratory Supervisor** shall work in conjunction with the Architectural Representation Experimental Unit to supply students and faculty with full practical support for the visualization and production of 3D models and installations. The minimum academic requirement for holding the position is a degree in Architecture (B.Arch), terminal degree in Design (M.Des) or a terminal degree in Industrial Design (MID) from a recognized and accredited College or University, and one (1) year minimum experience of related work experience. The supervisor shall be responsible for:

- Promoting the use of the latest fabrication equipment and techniques.
- Providing orientations, technical expertise and support to enable students to present their work in the most efficient and innovative manner.
- Maintaining elevated security standards within the Laboratory.
- Coordinating the maintenance, operation, upgrade and/or update of equipment, machinery, tools and software as required for the optimal function of the Laboratory.
- Managing and coordinating the use of specialized equipment and machinery, materials and tools by students and faculty.

- Keeping fabrication techniques, material libraries and equipment current.
- Coordinating the upkeep and general state of the facilities within the Laboratory.
- Coordinate periodic inventory of equipment, tools, materials and supplies.
- Coordinate the purchase of new equipment, tools, materials and supplies.
- Coordinate the protocols and processes for the payment of services and equipment use for students, faculty and possible external parties as required.
- Recommend and coordinate purchase of new equipment, materials and tools as required, as well as decommissioning of outdated or damaged equipment.
- Provide administrative support to the PCUPR School of Architecture as it pertains to the operation of the Lab within the general administrative structure.
- Supervise and coordinate tasks for employees and work-study participants assigned to the Fabrication Laboratory.

The **Fabrication Laboratory Machine Operator** shall work under the direct supervision of the Fabrication Laboratory Supervisor. The minimum academic requirement for holding the position is an Associate Degree or Technical Degree in Drafting or Engineering from a recognized and accredited College or University, as well as basic knowledge of digital and graphic design software and three (3) or more months of related experience. The Machine Operator shall be responsible for:

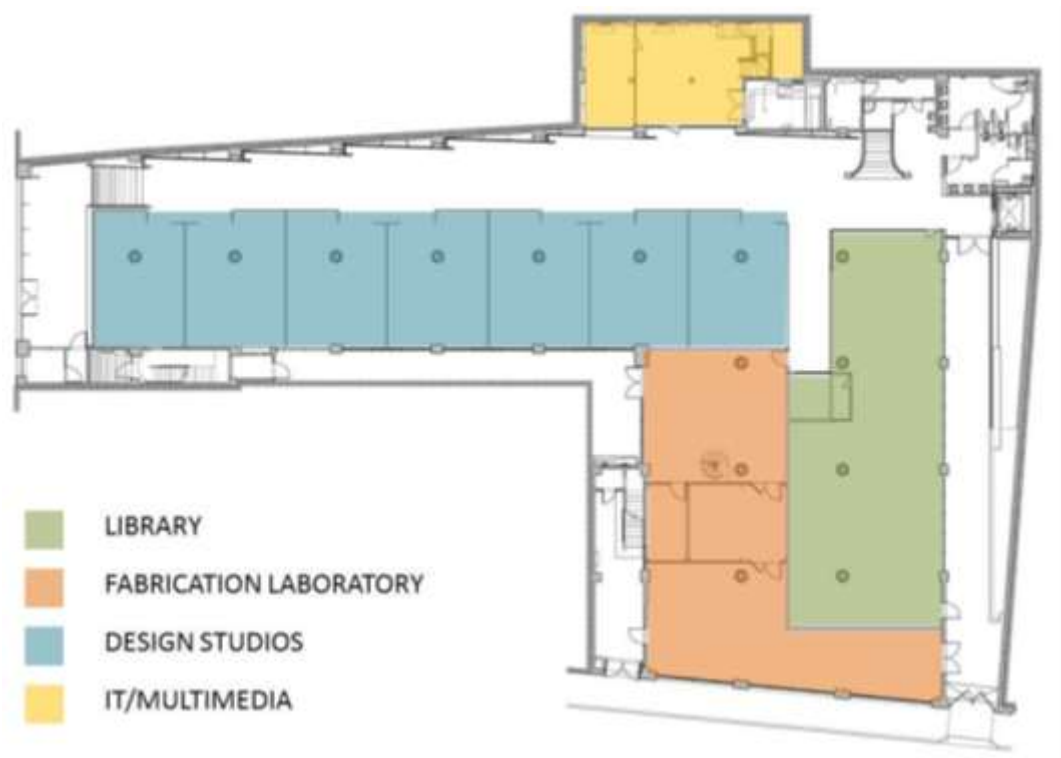
- Providing students and faculty with technical orientations and support regarding the safe and appropriate use and disposition of equipment in the Fabrication Laboratory.
- Provide support in maintaining a high level of security and the welfare of users.
- Providing support in tasks related to general maintenance, inventory, upkeep and general cleanliness of the work areas.
- Provide support for any administrative task as required by the Laboratory Supervisor.

I.2.3. PHYSICAL RESOURCES

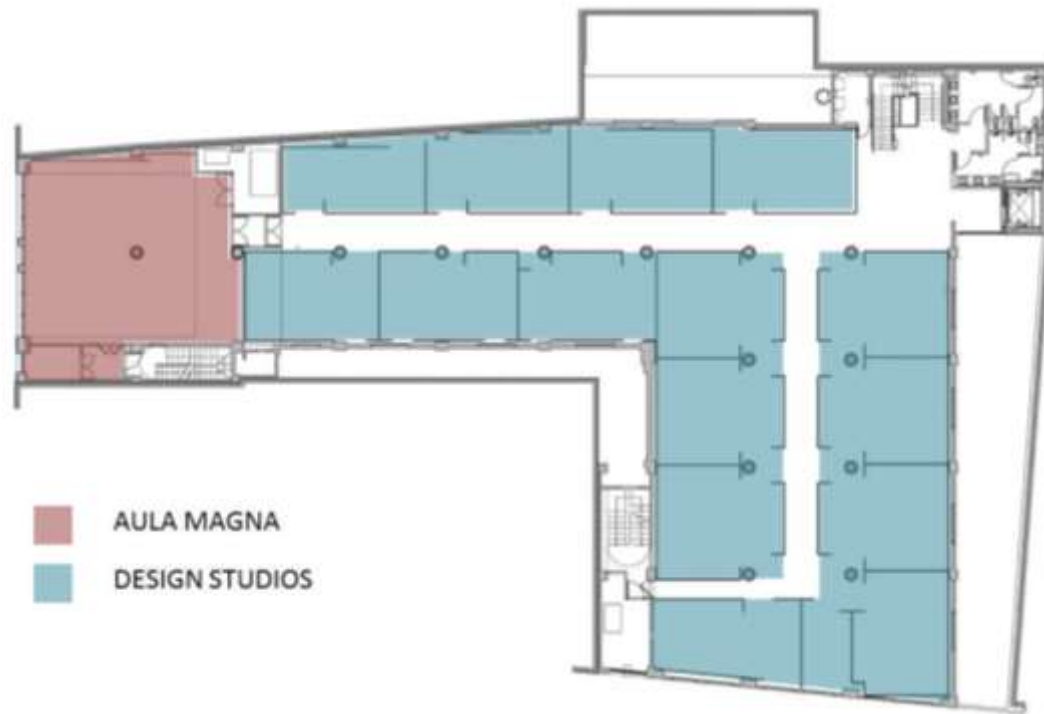
FACILITIES

The Forteza building, home to the PCUPR School of Architecture, dates to 1926 and was the original site of a Ponce's first and only local department store. Located along the east side of Ponce's central square (Plaza Las Delicias), it provides a main entry on Marina Street and an alternate entry on Cristina Street. The building has approximately 13,000 sq.ft. of usable space (not including service areas) on each of the three existing floors, bringing the School's spatial capacity to approximately 45,000 square feet overall.

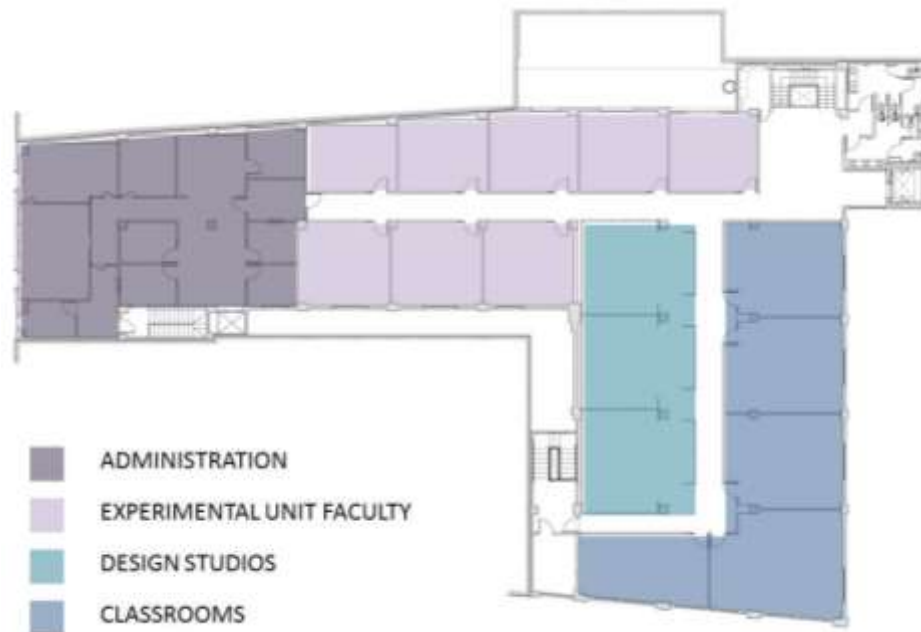
The first level, accessible from both Marina and Cristina streets, provides a main reception area, security desk, seven (7) Design Studio modules, the CARIBET Library, the IT/Multimedia Laboratory, and the Fabrication Laboratory. This level has been prepared to accommodate most of the academic support services the School currently offers as well as Design Studio space exclusive to first and, depending on availability, second year students.



The second level provides space for second, third and fourth year students, as well as the Aula Magna, the School's main lecture and conference area with a capacity of 120 persons. As with first floor infrastructure, all Design Studios have between 15 and 16 workstations for studio work, as well as worktables for model-making and general studio critiques.



The third floor of our Forteza building relies with a space reserved for each one of the Experimental Units, except for the Fabrication Laboratory which has its own facilities in the first level. In the third floor, next to the Dean's administrative offices and in proximity with fifth year students, the Experimental Units have an ample space that includes furniture for all the professors and researchers responding to that Experimental Unit, work and meeting areas with all the technological infrastructure to advance in their respective research and undertaking all sorts of academic work pertinent to the curricular structure of the School.



INFORMATION TECHNOLOGY AND MULTIMEDIA

The IT/ Multimedia office is located on the first floor of the Forteza Building. It is directly responsible for the PCUPR School of Architecture's technological, communications, networking and audiovisual infrastructure. It is conceived as the central hub for all technological services and support within the School, as well digital printing in a variety of media and formats. It provides students, faculty and staff with the resources, hardware and software necessary for design process and information resources.

The Data Center portion of the IT/Multimedia office manages and processes digital equipment, student data, software, documents and networking for students, faculty and administration through a state of the art 64-bit Windows platform and a secure 16 Terabyte Aberdeen Abernas storage server. It also houses a secondary Virtual Server that is remotely "visible" from the Institutional IT Department and serves as the main Operating System, network software licensing and script repository. The network is routed through three routing switches (one per floor) to distribute ethernet cabling and Wi-Fi throughout the facility. The School has access to a dedicated DS3 internet connection that provides 45 Mbps bandwidth connection.

The Multimedia portion of the office is slated as the one-stop digital output center for all users, providing the capability of producing full color prints in a variety of

formats, as well as access to large format scanning, document finishing equipment, and digital audio/video equipment.

Every student enrolled in design studio courses and every member of the administration has access to an individual high performance Design Workstation with dual 21 inch LED monitors. Additional laptop computers are available for loan to faculty and travelling administrators. The full computer and technological system inventory of the School of Architecture is provided below.

The PCUPR School of Architecture, which is founded on a high end technological base, does not accrue additional fees for access to computers, yet printing services are.



DESIGN WORKSTATIONS		SOFTWARE LICENSES	
HP Z400 Workstation	142	AutoDesk Building Design Suite 2015	142
<i>Windows 7 64-bit</i>		AutoDesk Entertainment Creation Suite 2015	142
<i>320 GB and 500GB Hard Disk</i>		Adobe Master Collection CS4	142
<i>8 GB RAM</i>		Rhinoceros Educational Lab Kit	142
<i>NVIDIA Quattro FX 1800 Video</i>			
HP Z400 Workstation	115	AutoDesk Building Design Suite 2015	115
<i>Windows 7 64-bit</i>		AutoDesk Entertainment Creation Suite 2015	115
<i>500GB Hard Disk</i>		Adobe Master Collection CS5	115
<i>8 GB RAM</i>		Rhinoceros Educational Lab Kit	115
<i>ATI Firepro V4800 1GB video</i>			
HP Z400 Workstation	78	AutoDesk Building Design Suite 2015	78
<i>Windows 7 64-bit</i>		AutoDesk Entertainment Creation Suite 2015	78
<i>320GB Hard Disk</i>		Adobe Master Collection CS5.5	78
<i>8 GB RAM</i>		Rhinoceros Educational Lab Kit	78
<i>NVIDIA Quattro 600 1GB video</i>		V-Ray for Rhinoceros	78
		ArcGIS Archinfo Educational Lab Pack	31
HP Z420 Workstation	60	AutoDesk Building Design Suite 2015	60
<i>Windows 7 64-bit</i>		AutoDesk Entertainment Creation Suite 2015	60
<i>500GB Hard Disk</i>		Adobe Master Collection CS6	60
<i>12 GB RAM</i>		Rhinoceros Educational Lab Kit	60
<i>NVIDIA Quattro 600 1GB video</i>		V-Ray for Rhinoceros	60
		Lumion 5.0 Educational	16
TOTAL WOKSTATIONS	395		

PRINTING EQUIPMENT		SOFTWARE	
ecoprintQ MJP B-100 Pay Station	1	Paper Cut Print Management	500
HP Z6100 Color Plotter	3		
RICOH W3600 Color Copier	1		
RICOH MPC 8002 Color Copier	1		
RICOH MPW 2400 Large Format	1		
HP Office Jet K8600	4		
HP LaserJet P1006	10		
HP LaserJet CM1312	1		

SERVER/NETWORK HARDWARE	
HP Proliant DL380 Virtual Server Manager	1
HP Proliant DL380G6 Virtual Servers	2
Aberdeen 585X 12TB Virtual Storage Server	1
Aberdeen 365X 16TB NAS File Server	1
Dell Poweredge 1950 Server	1
Palo Alto Firewall Server	1
Seagate 3TB NAS Backup Unit	1
Cisco Aironet Wi-Fi Access Points	7

FABRICATION LABORATORY (FABLAB)

The Fabrication Laboratory at the PCUPR School of Architecture is characterized for establishing itself as a center where manufacturing technology and computerized design meets. Its mission is to give students the ability to develop innovative concepts with the highest technology available to market. Its staff is composed of architects and industrial designers committed to educating students learn about new materials, technologies, and advanced manufacturing methods. The students are part of an atmosphere where technology and creativity go hand in hand, working in a suitable space for personal development and experimentation.

The FabLab is equipped with computer controlled machines that will grant students the ability to create high quality prototypes and models. Among these machines are CNC (computer numerical controlled) mill, Laser Cutter, and 3D printers (Rapid Prototyping machines). These tools provide the students with a detailed exploration of form and space during critical design phases and final

project executions. The laboratory will produce prototypes that facilitate the continuous exploration or validation of results, generated from the course or throughout the progress of the design exercise.



The FabLab's vision is to present students a diverse world where technology helps them projects their ideas into tangible objects of the highest quality possible and to acquire the technical knowledge to effectively use technology in the development of innovative concepts relevant to our current era. To develop a center of exploration focused on the development of new materials and emergent technologies, applicable to the world of art, design and architecture.

The FabLab's mission is to provide students the necessary skills to develop physical models, prototypes and products of the highest quality, fidelity and competitiveness, and to discover the limits of manufacturing technology and its diverse applications. The Lab also intends to position the school as a center of vanguard architecture education and technological innovation.

DIGITAL FABRICATION EQUIPMENT

ShopBot PRS 4' x 8' bed CNC Router	1
Roland Modela MDX-40A CNC Milling	2
Universal PLS6.75 Laser Cutter	1
MakerBot Replicator 2 PLA Desktop 3D printer	1
Dimension SST 1200es 3D Printer	1
Formech 508DT Vacum Forming	1

WOODSHOP FABRICATION

Makita Slide Compound Miter Saw	2
Milwaukee Heavy-Duty 8" Panel Saw	1
Powermatic 18-inch Variable Speed Drill Press	1
Powermatic 8-inch Jointer	1
Jet JWL-1236 Wood Lathe	1
Delta 6" Belt/ 12" Disc Sander Center	1
Powermatic PDS-12CS 12" Disc Sander	1
Jet EHVS-80CS Edge Horizontal/ Vertical Sander	1
Jet 14-inch Woodworking Band Saw	1
Jet SBR-30N / -40N Shear, Brake and Roll	1
Powermatic 10 inch Cabinet Saw	1
Jet 18-inch, 20-inch Band Saw	1
Lincoln Electric SP-1 75T Welder	1

HANDTOOLS

Makita 2414NB Hand Table Saw	1
Makita HG 1100 Heat gun	1
Makita LXPH01 Cordless Drill	7
Makita B04556 Finishing Sander	2
Makita BSS610 Hand Saw	1
Makita DC18RA Battery Charger	2

SUPPORT EQUIPMENT

Phoenix Support Cleaning Apparatus (SCA)	4
Powermatic PM1900 Dust Collectors	2
NOTRAX AntiFatigue Mats	6
Jet AFS-2000 Ceil. Mount Air Filtration Units	2
BOFA Advantage 1000 Laser Fume Extraction	1

Use of the PCUPR School of Architecture's Fabrication Laboratory requires a clear understanding of the established rules and safety protocols. A "Fabrication Laboratory Training Seminar" is scheduled every year among all first year design studio sections. This seminar includes an oral presentation by the FabLab Supervisor, an eleven (11) page manual, an Institutional Release of Liability form, and a written/practical examination on the correct use of workshop equipment. A pass evaluation on the written/practical examination is required for use of the Lab; nevertheless, direct supervision from Lab staff is always required. Safety protocols and rules are also posted at different locations throughout the Lab.

Woodshop tools are available and free of charge to be used within the premises of the FabLab. Digital fabrication equipment is available by reservation and requires a fee. The CNC Router, CNC Milling Machine, and the two (2) Laser Cutters are charged by time of use (hr or min.). The Dimension 3d Printers and the Makerbot Replicator are charged by quantity of material consumed (in³). Rates vary depending on the technology used. CNC and Laser Cutter use is charged by time; 3D printing is charged base on material consumption.

Digital fabrication equipment is available for reservation through SimplyBook.me, an online service tailored for this particular use. The easy to use interface is accessible from any mobile or internet ready hardware, and reservations are usually completed in three steps. FabLab personnel will receive email confirmation of every reservation, where a preliminary consultation is then scheduled prior to actual equipment use to ensure that the digital files have been created and constructed properly. The consultation will also yield a preliminary cost estimate which students must pay prior to their scheduled reservation. Payment is manually debited by FabLab staff using the PaperCut Print management system.

I.2.4. FINANCIAL RESOURCES

The PCUPR School of Architecture's main revenue source is, as most undergraduate private academic institutions, through enrollment and tuition. The cost per credit for the School of Architecture (\$300.00 USD) is higher than that of other programs within the PCUPR (\$190.00 USD), except for the PCUPR School of Law. The premise behind the School's cost per credit calculation was arrived considering several factors. With the advent of an unprecedented "one computer per student" policy, state-of-the-art facilities, high-end fabrication laboratory and unprecedented access to software, the PCUPR School of Architecture could substantiate the cost increase in tuition for its students. The cost per credit calculation was also arrived through an intensive Feasibility Study done in 2009 as part of the documentation for the opening of the School. Factors included in the feasibility study include operational cost increments, building acquisition and

rehabilitation, technology, and academic faculty needs to meet the proposed curricular structure.

The PCUPR School of Architecture's cost of enrollment is higher than the other three Architecture Programs in Puerto Rico, one of which is run by the state (*University of Puerto Rico*) with the advent of direct government funding, and the others (Polytechnic University of Puerto Rico and *Universidad del Turabo*), which are modeled on more traditional schools with limited access to technology. Tuition cost at The PCUPR School of Architecture is significantly less than other professional degree programs in mainland US and Europe.

Expenses within the PCUPR School of Architecture are divided into Salaries and Wages and Operational Costs. Salaries and Wages are related to administrative and faculty payroll and benefits, while operational expenses comprise utilities, financing, depreciation, facilities, contracted services, professional services, equipment, travel, and security, among others. Revenues are mainly accrued through tuition and fees.

The PCUPR includes two very specific line items within the Operational Cost realm: depreciation and interest. These two line items constitute the biggest part of the yearly budget and play an important role in calculating the solvency of the program. Depreciation costs are factored into the expenditure framework as a guarantee that the infrastructure and technological investment can self-generate after the established depreciation cycle to promote the reacquisition of furniture and technological infrastructure, as well as facility improvements.

The PCUPR budgeting process is established on a yearly basis and is aligned to the Institution's Strategic Plan and the School's Operational Plan. After careful analysis, the strategic plan and the operational plans, based on the strategic priorities, are aligned to the resources needed, providing an adequate basis for the approval of resource allocation dependent on the availability of funds. The results are evaluated by units and action plans are developed which serve as the basis in the preparation of the following year's budget and operational plan. The process is facilitated by the Vice-Presidency for Institutional Development, Research, and Planning (VPIDRP). This process has improved the effectiveness and efficiency of strategic planning by aligning the institutional strategic priorities and goals with the budgeting development processes and making it more participatory. It seeks to further develop and maintain the linking of the budget process with strategic, operational, and action plans. Planned levels of enrollment, projected tuition increases, and intended activities are factors used to develop projected yearly budgets based on strategic priorities (*PCUPR Institutional Self-Study Report – MSCHE, February 2014, p.18*).

Based on institution-wide enrollment, revenues, expenditures, and capital acquisitions projections, the PCUPR Budget Office will assign a preliminary lump-sum budget to every College or School, depending on the case, and is usually a positive or negative deviation from the previous year budget depending on the above mentioned criteria. Once preliminary communications have been established, it is required that every Department submits a broken down budget based on the acting operational plan. In this manner, funds are diverted to activities which support objectives and goals within the seven institutional priority areas (*see I.1.4 Long Range Planning*).

PROGRAM REVENUE VS EXPENDITURE (2013-2015)

PROGRAM FINANCIAL DATA	2012-2013	2013-2014	2014-2015 ¹	2014-2015 ²
Salaries and Wages				
Faculty Salaries	\$ 234,254	\$ 272,563	\$ 272,806	\$ 128,316
Faculty Salaries extra	\$ 857,225	\$ 858,658	\$ 875,000	\$ 430,984
Admin. Salaries Non exempt	\$ 107,790	\$ 107,496	\$ 134,680	\$ 76,209
Admin. Salaries Extra	\$ 2,604	\$ 273	\$ 273	\$ 441
Admin. Salaries exempt	\$ 123,698	\$ 151,579	\$ 194,922	\$ 113,686
Special and Eventual	\$ -	\$ 13,870	\$ -	\$ -
Student Help	\$ 3,901	\$ 2,512	\$ 800	\$ -
Profesional Serv. - Employee	\$ 2,841	\$ 18,660	\$ 8,000	\$ -
Reimbursed expenses	\$ 11,324	\$ 10,647	\$ 9,320	\$ 4,874
Vacations	\$ 1,661	\$ -	\$ -	\$ -
Fringe Benefits	\$ 141,509	\$ 154,585	\$ 160,900	\$ 84,527
Operational Expenditure				
Instructional and Lab Supplies	\$ -	\$ -	\$ -	\$ -
Office Supplies	\$ 1,773	\$ 2,162	\$ 2,149	\$ 1,312
Postage	\$ 776	\$ 997	\$ 561	\$ 248
Printing and Binding	\$ 135	\$ 80	\$ 171	\$ 86
Equipment Upkeep	\$ -	\$ -	\$ -	\$ -
Software	\$ -	\$ 2,140	\$ -	\$ -
Light and Power	\$ 249,076	\$ 225,942	\$ 275,000	\$ 83,885
Water	\$ 6,646	\$ 3,862	\$ 7,200	\$ 2,130
Repair Materials	\$ 1,970	\$ 5,265	\$ 5,738	\$ 2,600
Information Services	\$ -	\$ 2,200	\$ 2,200	\$ -
Professional Services	\$ 21,973	\$ 44,875	\$ 24,484	\$ 5,065
Rentals	\$ 3,757	\$ 1,475	\$ 13	\$ 12
Security Services	\$ 82,804	\$ 86,947	\$ 86,947	\$ 49,883
Other Contracted Services	\$ 106,118	\$ 63,354	\$ 61,154	\$ 34,075
Depreciation	\$ 634,441	\$ 623,599	\$ 623,599	\$ 363,766
Interest	\$ 424,659	\$ 424,659	\$ 424,659	\$ 424,659
Accreditation Expenses	\$ -	\$ 2,910	\$ -	\$ -
Department Research	\$ -	\$ -	\$ 5,705	\$ 247
Donations	\$ 1,150	\$ -	\$ 300	\$ 300
Dues	\$ 10,289	\$ 9,394	\$ 9,394	\$ 8,335
General Equipment	\$ 1,200	\$ 259	\$ 888	\$ 888
Magazine & Loose Leaf	\$ 2,954	\$ 1,874	\$ 2,235	\$ 2,235
Promotion and Advertising	\$ 18,684	\$ 17,422	\$ 11,241	\$ 11,241
Travel/Professional Adv.	\$ 69,407	\$ 74,382	\$ 32,670	\$ 7,209
Miscellaneous	\$ 26,002	\$ 14,141	\$ 14,603	\$ 10,761
TOTAL PROGRAM EXPENDITURE	\$3,150,619	\$3,198,782	\$3,247,611	\$1,847,975
Program Revenues				
Tuition	\$2,627,285	\$2,802,225	N/A	N/A
Fees	\$322,050	\$338,970	N/A	N/A
Other Sources	\$6,320	\$0	N/A	N/A
TOTAL PROGRAM REVENUE	\$2,955,655	\$3,141,195		

¹ Budget for 2014-2015 fiscal year

² Committed as of February 2015

Due to various factors such as the latest modifications introduced by the Federal Government to the Students Grants and Loan conditions, together with the challenges that Puerto Rico's economy has been facing for the last decade, our School as the rest of the PCUPR and the huge majority of the Higher Educational Institutions in Puerto Rico has received the negative impact of this weakening economy reflected on the amount of new students' enrolment. In the case of architecture we should add, that the present situation is also affect severely the Construction Industry, turning all the construction related professions to a not so attractive academic options, reducing the amount of new students' applications.

Aware of this situation, and also of the fact that the present adverse conditions may not change in the foreseeable future, we are laying out the following strategies:

- Strategy #1: Re-visiting our Academic Program with the idea to reduce the total credits requirements by eliminating some courses and/or consolidating others, while not affecting the quality or the concept of our offer. With present costs of \$300.00 (\$305.00 for the next academic year) per credit, this action aims to end with a leaner Program, and a less expensive and more affordable study costs.
- Strategy #2: Reduce the present administrative and operational cost by eliminating positions (such as Associate Dean and the History and Theory Experimental Unit Coordinator) and cutting down some expenses (such as Power and Electricity) all these have the intention to make our Program more economically feasible, and also in some instances re-route those funds to other academic activities.
- Strategy #3: Puerto Rico is a small island that presently has four different Architecture Academic Programs, three private institutions and one state university. Since our opening we are proud to count with the best facilities and the most advance digital technology. Even with the present economic constraints, but also knowing that technology is one of our strongest assets, we are still committed on keep improving on our top notch facilities by constantly investing in new equipment and technology and also in keeping the building in top shape.
- Strategy #4: Crises are opportunities, and in our School we have identified an opportunity with the present Puerto Rico's economic crisis. Since the local families possibilities are more limited, we are working in launching a campaign inviting the local prospective students, to have the experience of an independent living, similar but not as costly to that of the Colleges in mainland. With us, while in Puerto Rico, they still being able to have a "home away from home"

experience. At this moment more than 90% of our students are from the South and Southwest Regions of the Island, which allow us to believe that with our top quality offer we are in good position to attract a significant number of new prospects from San Juan metropolitan area, and from the Northern and Eastern coasts of Puerto Rico. Those students which until now were not considering us as their main option, and that in the past were used to moving to the States for their College Studies, but that now, due to some economic constraints, may have to stay here in Puerto Rico, we offer them access to both a quality academic experience and the student's independent living that they are also seeking.

- Strategy #5: Attract students from abroad. We have identified a significant potential in the Hispanic and Latino communities in the States, particularly those with Caribbean roots from the East and Southeast coast. The new generations of those communities (USA citizens) are very much intrigued with the possibility to have a living experience in their native families place of origin but within the USA Country Boundaries, with total access to the students' financial aid under the USA laws and constitutional framework. Having this in mind we are in the process of identifying high schools in mainland USA, preferably on the East, South-East coast and also in the upper Mid-West (Chicago) where a significant amount of Puerto Ricans, Dominicans and Cubans communities are concentrated and where we understand our academic offer could result an attractive study abroad experience to these communities' younger generations.
- Strategy #6: International experience is another strategy that we are implementing in coordination with all of the above. Presently we are moving forward with academic alliances with UNICA, in Managua Nicaragua, CEU San Pablo University in Madrid, and UNIBE School of Architecture in Santo Domingo, Dominican Republic. With these alliances in Spain and the Caribbean Basin we procure to reinforce our School as a prime option for those students from the States that are pursuing a Hispanic experience (refer to Strategy #5) and also we are procuring an increment of our presently limited international students. PCUPR School of Architecture will become an appealing option for those students from the previously mentioned International Academic Institutions that might like to study under the USA standards but in the Spanish language.
- Strategy #7: Use our Experimental Units faculty as a strong resource for both lectures and workshops open to the professional and general public. This activity should become a significant source of additional income.

Revenue for PCUPR School of Architecture during the past five years has been exclusively based on tuition and fees from student enrollment. The 2013-2014 fiscal year total enrollment of 318 students, with an average of 33.5 credits, and a credit cost of \$295 per credit. This provided for total revenues of \$3,141,195 during the 2013-2014 year. The 2014-2015 fiscal year provided almost identical student body and credit per student figures, yet cost per credit rose to \$300. The Pontifical Catholic University of Puerto Rico has established that cost per credit shall increase by \$5 per year, assuming a constant 300 student enrollment and credit per student figure should provide for a yearly increase in tuition-based revenue of approximate 1.5% to 2%.

This revenue projection is based exclusively on our income per credits anticipating a constant students' population of about 300 total. Nonetheless we are positive that some of the Initiatives that we are promoting as part of our new strategies, once in place, should represent an increase in our School's revenues in a near future. As previously mentioned these include, but are not limited to:

- International student recruitment, particularly from the Hispanic and Latino communities within the mainland United States. We are positive that our "Academic Offer" represents an attractive study abroad experience to these communities' younger generations under the premise of cultural proximity, affordable tuition and living, as well as common citizenship. This initiative could potentially increase our total student population, bettering our present projected steady figure of 300 and an increase in enrollment revenues.
- Supporting Research Initiatives with the intention to strengthen the Research Culture of our Program. With a newly appointed "Researchers Coordinator" who will mentor younger researchers, our School is in a much better position to identify and compete for external funds (*grants*) that will represent an additional revenue, not connected to the enrollment incomes.

ANNUAL EXPENDITURES AND TOTAL CAPITAL INVESTMENT PER STUDENT

As the Program Revenue vs Expenditure (2013-2015) table shows, the annual expenditure for the PCUPR School of Architecture in the 2014-2015 fiscal year was \$3,247,611.00. This amount includes faculty fees of \$1,500.00 per credit, including part time Lecturers. Compared to the quantity of 319 students, for the 2014-2015 fiscal year the School of Architecture's capital investment per student was \$10,180.60.

After comparing our Program's annual expenditures with other similar PCUPR academic units, the conclusion is that there are not significant differences in the capital investment per student. Within our University, the School of Law is the only Program that could be considered as our professional degree counterpart. Their annual expenditure for the 2014-2015 fiscal year was approximately \$6,000,000.00. This amount includes faculty fees of \$1,300.00 per credit, including part time Lecturers. Compared to the quantity of 585 students, paying \$485.00 per credit, for the 2014-2015 fiscal year the School of Law's capital investment was \$10,256.41.

It should be noted that an important difference between the Schools is that the services for the students in the Architecture Program are provided by the institutional central administration at no additional costs. This refers to the Registrar's Office, Admissions Department, Guidance Center, among others. It is not the case with the School of Law, which has to invest in administrative personnel for these activities.

I.2.5. INFORMATION RESOURCES

The CARIBET Library at the PCUPR School of Architecture is a center that aims not only to collect and preserve a variety of resources in the multidisciplinary realm of the education of the architect, but to promote knowledge in a dynamic, accessible and well organized manner. The resources within the library encompasses a wide range of themes within the Experimental Unit format that the School has adopted, and does so in both physical and electronic formats as available. The CARIBET library's mission is:

- To develop a collection of resources that allows for the study and teaching of the traditional and technological aspects of the practice.
- To create an environment that fosters research and a well-rounded creative process.
- To optimize the methodology of research through electronic databases and cataloging techniques.
- To promote the habit of use of the facility and its resources.
- To preserve and provide access to specialized resources.

The CARIBET Library's objectives are:

- To develop a well balanced collection that promotes unbiased research and guarantees the right of information to all as established by the Declaration of Library Rights.

- To promote the creation and development of relevant and creative programs that respond to a holistic academic and professional environment.
- To utilize and promote the latest information and technological resources to the service of research, academic development, and enrichment of the cultural, social and professional formation of future architects and designers.



The creation of a well balanced and inclusive collection of textbooks, periodicals and digital resources is achieved by the symbiotic relationship between Library personnel, the school's administrative structure, faculty, and the Experimental Unit coordinators. Each collection, created by subject matter based on the Unit Coordinators' area of expertise, is constantly being scrutinized for relevance and up datedness. Every fiscal year, each Experimental Unit Coordinators provide a list of books, journals and electronic subscriptions to be considered, and if feasible, purchased by the library.

The CARIBET Library's current inventory of catalogued titles is 4,034, with an additional 578 additional titles in the PCUPR main campus library (Biblioteca Encarnación Valdés) just minutes from the School of Architecture. The PCUPR School of Architecture also has ongoing yearly subscriptions to 62 periodicals related to architecture, urbanism, design, and complimentary subjects, as well as

electronic databases such as Avery Index to Architectural Periodicals Literature and Art Source. Other electronic databases within the School's inventory include:

EBSCO

- Academic Search Complete
- Applied Science and Technology Source
- Biography Reference Center
- Business Source Complete
- Caribbean Search (119 full-text journals and 561 full-text books)
- CINAHL
- Educational Source
- Fuente Académica Premier
- GreenFILE
- Library, Information Science & Technology Abstracts
- Regional Business News
- Teacher Reference Center
- eBook Academic Collection

ProQuest

- Dissertations & Theses Global Full Text
- ABI/INFORM Research 1971-
- ebrary® e-books

Systems Link International
Global eJournal library

Latin Knowledge Consulting
E-Libro Catedra

ERIC: Education Resources Information Center

Federal Government Documents Databases

- www.catalog.gpo.gov
- www.gpo.gov/fdsys
- www.metalib.gpo.gov
- www.usa.gov/gobiernousa
- www.science.gov/

I.3. INSTITUTIONAL AND PROGRAM CHARACTERISTICS

I.3.1. STATISTICAL REPORTS

STUDENT DEMOGRAPHICS

The following is quantitative data regarding total yearly enrollment, type of enrollment, race/ethnicity, and gender of the students enrolled in the Architecture Program from fall 2012 to spring 2015.

		2012-2013	2013-2014	2014-2015
ENROLLMENT				
Students enrolled		72	66	59
TYPE OF ENROLLMENT				
Freshmen		69%	62%	74%
Transfer		31%	38%	26%
RACE/ETHNICITY				
Hispanic		100%	100%	100%
Non-hispanic		0%	0%	0%
GENDER				
Male		72%	66%	58%
Female		28%	44%	42%

FACULTY DEMOGRAPHICS

It should be noted again that presently (at the moment we are working on this APR) our School does not have any faculty member dedicated exclusively (100%) to instructional duties, except for our Librarian which is considered a Full time Faculty. In addition to her, our Program Director, who is also full time, divides his time 60% for administrative work and the remaining balance of 40% is dedicated to instructional duties. Our former Associate Dean, Luz M. Rodríguez-López, Ph.D., is also a full time Faculty who also divides her time 60% for administrative and 40% for instructional duties.

By the time of the NAAB Initial Accreditation Visit next semester (Fall 2015) we are forecasting the inclusion of our first full time faculty member who will be assigned exclusively to academic responsibilities.

The following is quantitative data for type, race/ethnicity, gender and professional licensure status of active faculty within the fall 2012 to spring 2015 period:

		2012-2013	2013-2014	2014-2015
FACULTY				
Full Time		1.4	1.8	1.8
Part Time		41	53	45
Visiting		4	0	0
Professional Licensure				
Puerto Rico		13	12	12
Wisconsin		1	0	0
RACE/ETHNICITY				
Hispanic		46	55	46
White/Non-hispanic		1	0	1
GENDER				
Male		35 (74%)	37 (67%)	30 (64%)
Female		12 (26%)	18 (33%)	17(36%)

I.3.2.ANNUAL REPORTS

Per the 2009 Conditions for Accreditation, Annual Report Submission (ARS) Data and NAAB Responses to the annual reports will be submitted by NAAB to the team prior to the scheduled visit.

I.3.3.FACULTY CREDENTIALS

See **Part I, Section 2.1** for Faculty Matrix and **Part IV, Section 2** for Faculty Resumes.

I.4. POLICY REVIEW

Per the 2009 Conditions for Accreditation, documents regarding this section will be provided in the team room during the visit. The proposed documents shall include:

INSTITUTIONAL POLICY DOCUMENTS

- Equal Employment Opportunity Policy Statement (July 1, 2010)
- Crime Awareness and Campus Security Act (Title II, Public Law 101-542)
- *Manual del Claustro de la Pontificia Universidad Católica de Puerto Rico* (Pontifical Catholic University of Puerto Rico's Faculty Manual)
- *Manual del Estudiante de la Pontificia Universidad Católica de Puerto Rico* (Pontifical Catholic University of Puerto Rico's Student Manual)
- *Política ambiental institucional* (Institutional Environmental Policy)
- *Política de investigación académica* (Academic Research Policy)
- *Política de marcas y nombres* (Trademarks and Names Policy)
- *Política de salud y seguridad ocupacional* (Health and Occupational Safety Policy)
- *Política institucional de propiedad intelectual* (Institutional Policy on Intellectual Property)
- *Política institucional sobre el hostigamiento en el empleo (Ley núm. 17, 22 de abril de 1988)* (Institutional Policy on Sexual Harrassment)
- *Política institucional sobre privacidad y divulgación de información* (Institutional Policy on Privacy and Information Disclosure)
- *Política para acomodo razonable en el empleo (Ley num. 44, 2 de julio de 1985 y ADA)* (Policy for Reasonable Accomodation in Employment)
- *Política institucional para una comunidad universitaria libre de alcohol, tabaco y sustancias controladas* (Institutional Policy for an Alcohol, Tobacco and Controlled Substance Free University Community)
- *Política institucional sobre el cumplimiento de protocolo sobre el manejo de situaciones de violencia doméstica en el lugar de trabajo* (Institutional Policy on the Management of Domestic Violence Situations within the Workplace)
- *Política y código de vestimenta* (Dress Code and Policy)

ADMINISTRATIVE POLICIES AND PROTOCOLS

- *Manejo de emergencias y traslado de estudiantes, invitados y visitantes* (Emergency Management and Transport of Students, Guests and Visitors)
- *Políticas, protocolos y procedimientos de presupuesto y finanzas* (Budget and Financial Policies, Protocols and Procedures)
- *Protocolo de acceso y entrada al Edificio Forteza* (Protocol for Entry Access to Forteza)

- *Protocolo de seguridad en el Laboratorio de Fabricación* (Fabrication Laboratory Security Protocol)
- *Uso de sistemas de red y equipo de computadoras en Forteza* (Use of Digital Network and Computer Equipment in Forteza)

ACADEMIC POLICIES AND PROTOCOLS

- Advising Policies; including policies for evaluation of students admitted from preparatory or pre-professional programs where SPC are expected to have been met in educational experiences in non-accredited programs
- *Información relacionada a la convalidación de créditos para estudiantes transferidos* (Information Related to the Recognition of Credits for Transfer Students)
- *Formularios de matrícula* (Registration Forms)
- *Plan de Avalúo Departamental de la Escuela de Arquitectura* (Program Assessment Plan for the School of Architecture)
- *Plan de Avalúo Institucional* (as submitted to the MSCHE 2005-2010) (Institutional Assessment Plan)
- *Procesos de matrícula presencial y en línea* (Regular and On Line Registration Processes)
- *Procedimiento de Baja Automática (W3 y W4)* (Automatic Withdrawal Procedure)
- *Recomendación para entrevista con el Decano* (Dean's Interview Recommendation)
- *Referimiento a consejería y orientación* (Guidance and Counseling Referral Form)
- *Referimiento por incidente de conducta* (Misconduct Referral)
- *Requisitos de admisión* (Admission Requirements)
- *Servicios de consejería y orientación* (Guidance and Orientation Services)

OTHER DOCUMENTS

- Student-to-Faculty ratios for all components of the curriculum (i.e., studio, classroom/lecture, seminar)
- Square feet per student for space designated for studio-based learning
- Square feet per faculty member for space designated for support of all faculty activities and responsibilities
- Forteza Building plans and illustrations
- School of Architecture Curriculum

- Student Performance Criteria Matrix
- Faculty Resumes and Posters

II. PART TWO: EDUCATIONAL OUTCOMES AND CURRICULUM

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II.1. STUDENT PERFORMANCE – EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA

II.1.1. STUDENT PERFORMANCE CRITERIA

CURRICULAR GOALS AND OBJECTIVES

Our academic program consists in a five (5) year Professional Bachelor Degree in Architecture subdivided into Architectural Design Development Studios and nine (9) Experimental Units. This concept pursues to address what we identify as the most prominent subjects on our profession. The pedagogical strategy of our Program is to expose the students to the referenced subjects in order to prepare a well-rounded architect.

The curricular structure is essentially founded in the inclusion of a variety of skills and how all of them should be harmoniously organized as essential components of the 21st Century architects' professional domain. Again the Experimental Units are: Architectural Representation (ARAR); History and Theory (ARHT); Adaptive Conservation and Preservation (ARAC); Sustainability and Technologies (ARST); Structural Framework and Assemblages (ARSF); Landscape, Ecology and Environment (ARLE); Urban-Scape and Communities (ARUS); Legal and Administrative Awareness (ARLA); and Development Assessment, Entrepreneurship and Feasibility (ARDA).

Based on the last NAAB Visiting Team comments, the School has been working in the smoothing the transition between the Units by redefining the content of some of the Core Courses, and by rotating faculty assigned from one Experimental Unit to courses included under a different Unit. Also, a restructuration of some of the courses has been made with the intention to repeat and reinforce some of the fundamental professional skills that compose our program.

Refer to the table below for a detailed description of the goals and objectives of the Program in direct relationship to the Units' academic scope:

Goal	Objectives	Unit
1. Prepare future generations in the process of solving design problems inherent to the profession.	1. Promote a meaningful search for innovative and cutting-edge design solutions to architectural problems affecting the contemporary cities and society.	ARAD
2. Acquire a holistic understanding of the tools needed in the exercise of the discipline.	2. Expose students to the most recent and current digital tools that routes them in a unique process of formal and experimental research.	ARAR
3. Identify the architectural, cultural, political and social relations between Puerto Rico and the international scope.	3. Acquaint students to the history of the profession, analyzing their strengths and weaknesses in expanding knowledge and theoretical understanding of the architectural theme.	ARHT
4. Train professionals to be capable of intervening in our territory and its entire perceptual load.	4. Train the entire enrollment in technical expertise to propose interventions in the historical context of a region with a unique architectural wealth.	ARAC
5. Identify cutting edge technology necessary to encourage sustainable developments.	5. Promote the use of sustainable and efficient technologies as operational methods, considering its relevance to the energy crisis and wasted resources.	ARST
6. Provide a better understanding of the physical forces operating on building developments.	6. Introduce the necessary structural concepts for an architecture that, though artfully challenges the typical and traditional implementation, can be real and enforceable.	ARSF
7. Assess the dependence and interaction between landscape and architecture.	7. Provide appropriate training concerning aspects of landscape design and ecological awareness in support to architectural positions.	ARLE
8. Expand the projection field of the profession towards a larger scale vision of territorial purposes and possibilities.	8. Suggest a critical analysis of the urban environment we inhabit, to establish appropriate action plans addressing the problem of implementing regional economic development.	ARUS
9. Provide the necessary knowledge to operate efficiently within the legal framework governing the planning processes.	9. Position the future architect in the midst of the ethical discussions prevalent in the exercise of professional decision making, in their moral, social and civic sense.	ARLA
10. Complement the architectural education with practical entrepreneurial skills and financial knowledge relevant to the profession.	10. Disseminate the entrepreneurial will as an integral part of the <i>modus operandi</i> for the architect, providing an invaluable training with direct repercussion to their eventual professional practice in the development of the territory.	ARAD
11. Understand the Gospel values as they illuminate the social, scientific, historical and cultural activities, as well as the physical and human environment around us	11. Enable students to understand the intrinsic value of Christianity and human dignity in the genesis of Western institutions.	THEO* *Applied to the entire Program

II.2. CURRICULAR FRAMEWORK

II.2.1. REGIONAL ACCREDITATION



MIDDLE STATES COMMISSION ON HIGHER EDUCATION
3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501
www.msche.org

STATEMENT OF ACCREDITATION STATUS

PONTIFICAL CATHOLIC UNIVERSITY OF PUERTO RICO
2250 Boulevard Luis A. Ferre Aguayo
Suite 564
Ponce, PR 00717-9997
Phone: (787) 841-2000; Fax: (787) 840-4295
www.pucpr.edu

Chief Executive Officer: Dr. Jorge Ivan Velez Arocho, President

INSTITUTIONAL INFORMATION

Enrollment (Headcount): 8073 Undergraduate; 2755 Graduate
Control: Private (Non-Profit)
Affiliation: Religious- Roman Catholic Church
Carnegie Classification: Doctoral/Research
Approved Degree Levels: Associate's, Bachelor's, Postbaccalaureate Certificate, Master's, Doctor's - Professional Practice, Doctor's - Research/Scholarship;
Distance Education Programs: Not Approved

Accreditors Recognized by U.S. Secretary of Education: American Bar Association, Council of the Section of Legal Education and Admissions to the Bar; New York State Board of Regents, and the Commissioner of Education

Other Accreditors: Puerto Rico Council on Education (PRCE); Council on Social Work Education; National Accrediting Agency for Clinical Laboratory Sciences (NAACLS); Council on Rehabilitation Education, Inc. (CORE); Teachers Education Accreditation Council (TEAC); Accreditation Commission for Education in Nursing (ACEN)

Instructional Locations

Branch Campuses: Pontifical Catholic University of Puerto Rico - Arecibo Campus, Arecibo, PR; Pontifical Catholic University of Puerto Rico - Mayaguez Campus, Mayaguez, PR

Additional Locations: Bayamon Central University, Bayamon, PR; Biotechnology and Agrobiotechnology Learning and Research Center (CEIBA), Ponce, PR; Franciscan Missionaries of the Eternal W, Birmingham, AL; School of Architecture, Ponce, PR; Seminario Mayor Interdiocesano, Ponce, PR; Seminario Santa Maria de los Angeles, San Juan, PR; Veterans Hospital, San Juan, PR

Other Instructional Sites: PUCPR - Coamo Extension, Coamo, PR

ACCREDITATION INFORMATION

Status: Member since 1953

Last Reaffirmed: June 26, 2014

Most Recent Commission Action:

June 26, 2014: To reaffirm accreditation and to commend the institution for the quality of the self-study process. The Periodic Review Report is due June 1, 2019.

Brief History Since Last Comprehensive Evaluation:

November 19, 2009: To accept the Periodic Review Report and to reaffirm accreditation. To request a monitoring report due October 1, 2011 documenting (1) implementation of a comprehensive institutional strategic plan that links long-range planning to decision-making and budgeting processes, including the integration into the plan of all the functional units (Standard 2); and (2) evidence of direct methods of assessment of student learning at the institutional and program level(s), including evidence that assessment results are used to improve teaching and learning (Standard 14). To further request that the next self-study clarify the relationship of the Ponce campus with the Arecibo and Mayaguez campuses, including planning processes (Standard 2), budgeting, including the ability to provide separate audited financial statements for the Ponce Campus (Standard 3), and governance structures between the campuses (Standard 4). The next evaluation visit is scheduled for 2013-2014.

June 28, 2011: To acknowledge receipt of the substantive change request and to approve the accreditation of Pontifical Catholic University of Puerto Rico as a single institution, the Pontifical Catholic University of Puerto Rico, with three campuses. The main campus is the Pontifical Catholic University of Puerto Rico, 2250 Las Americas Avenue, Suite 564, Ponce, PR 00717-9997; the other two campuses are branch campuses at Bo. Santana Carr. 662 Km. 2.03, Arecibo, PR 00614-4045 and 482 Calle Post S., Mayaguez, PR 00681. The next evaluation visit is 2013-2014.

July 20, 2011: To acknowledge receipt of notification from the institution that it has changed the name of the additional location at Carr. 3km 142.1 Gayama, PR 00785-0208 from Wyeth Pharmaceutical to Pfizer Pharmaceutical.

November 17, 2011: To accept the monitoring report. To note that the relationship of the Ponce campus with the Arecibo and Mayaguez campuses was clarified through the Substantive Change action by the Commission on June 28, 2011. The next evaluation visit is scheduled for 2013-2014.

May 1, 2012: To include the additional location at the Biotechnology and Agrobiotechnology Learning and Research Center (CEIBA), Lot #25 Sabanetas Industrial Park, Ponce, PR 00717, within the scope of the institution's accreditation. The next evaluation visit is scheduled for 2013-2014.

May 1, 2012: To acknowledge receipt of the substantive change request, to note the institution's decision to close its additional location at the Guayama Extension, Calle Palmer 5 Sur, Guayama, PR 00784, and to remove the location from the scope of the institution's accreditation.

August 20, 2013:

To request a supplemental information report, due September 19, 2013, addressing the Accreditation Commission for Education in Nursing (ACEN) accreditation action of July 11-12, 2013. The next evaluation visit is scheduled for 2013-2014.

- October 28, 2013: To acknowledge receipt of the substantive change request. To note that the institution has closed its additional locations at (1) Pfizer Pharmaceutical, Carr. 3, Km 142.1, Guayama, PR 00785; and (2) Baxter Pharmaceutical, Carr. 3, Km 142.5, Guayama, PR 00784. To remove these additional locations from the institution's accreditation. To note that the supplemental information report, due September 19, 2013, has been received and will be acted on by the Commission at its November meeting. The next evaluation visit is scheduled for 2013-2014.
- November 21, 2013: To accept the supplemental information report. The next evaluation visit is scheduled for 2013-2014.

Next Self-Study Evaluation: 2023 - 2024

Next Periodic Review Report: 2019

Date Printed: August 25, 2014

DEFINITIONS

Branch Campus - A location of an institution that is geographically apart and independent of the main campus of the institution. The location is independent if the location: offers courses in educational programs leading to a degree, certificate, or other recognized educational credential; has its own faculty and administrative or supervisory organization; and has its own budgetary and hiring authority.

Additional Location - A location, other than a branch campus, that is geographically apart from the main campus and at which the institution offers at least 50 percent of an educational program. **ANYA** ("Approved but Not Yet Active") indicates that the location is included within the scope of accreditation but has not yet begun to offer courses. This designation is removed after the Commission receives notification that courses have begun at this location.

Other Instructional Sites - A location, other than a branch campus or additional location, at which the institution offers one or more courses for credit.

Distance Education Programs - Fully Approved, Approved (one program approved) or Not Approved indicates whether or not the institution has been approved to offer diploma/certificate/degree programs via distance education (programs for which students could meet 50% or more of the requirements of the program by taking distance education courses). Per the Commission's Substantive Change policy, Commission approval of the first two Distance Education programs is required to be "Fully Approved." If only one program is approved by the Commission, the specific name of the program will be listed in parentheses after "Approved."

EXPLANATION OF COMMISSION ACTIONS

An institution's accreditation continues unless it is explicitly withdrawn or the institution voluntarily allows its accreditation to lapse. In addition to reviewing the institution's accreditation status at least every 5 years, the Commission takes actions to approve substantive changes (such as a new degree or certificate level, opening or closing of a geographical site, or a change of ownership) or when other events occur that require review for continued compliance.

Any type of report or visit required by the Commission is reviewed and voted on by the Commission. Reports submitted for candidacy, self-study evaluation, periodic review or follow-up may be accepted, acknowledged, or rejected.

The Commission "Accepts" a report when its quality, thoroughness, and clarity are sufficient to respond to all of the Commission's concerns, without requiring additional information in order to assess the institution's status.

The Commission "Documents receipt of" a letter or report when it addresses the Commission's concerns only partially because the letter or report had limited institutional responses to requested information, did not present evidence and analysis conducive to Commission review, were of insufficient quality, or necessitated extraordinary effort by the Commission's representatives and staff performing the review. Relevant reasons for not accepting the letter or report are noted in the action. The Commission may or may not require additional information in order to assess the institution's status.

The Commission "Rejects" a letter or report when its quality or substance are insufficient to respond appropriately to the Commission's concerns. The Commission requires the institution to resubmit the report and may request a visit at its discretion. These terms may be used for any action (reaffirm, postpone, warn, etc.).

Types of Follow-Up Reports:

Accreditation Readiness Report (ARR): The institution prepares an initial Accreditation Readiness Report during the application phase and continually updates it throughout the candidacy process. It is for use both by the institution and the Commission to present and summarize documented evidence and analysis of the institution's current or potential compliance with the Commission's accreditation standards.

Progress Report: The Commission needs assurance that the institution is carrying out activities that were planned or were being implemented at the time of a report or on-site visit.

Monitoring Report: There is a potential for the institution to become non-compliant with MSCHE standards; issues are more complex or more numerous; or issues require a substantive, detailed report. A visit may or may not be required. Monitoring reports are required for non-compliance actions.

Supplemental Information Report: This report is intended only to allow the institution to provide further information, not to give the institution time to formulate plans or initiate remedial action. This report is required when a decision is postponed. The Commission may request a supplemental information report at any time during the accreditation cycle.

Commendations:

Periodically, the Commission may include commendations to the institution within the action language. There are three commendations. More than one commendation may be given at the same time:

To commend the institution for the quality of the [Self-Study or PRR] report. The document itself was notably well-written, honest, insightful, and/or useful.

To commend the institution for the quality of its [Self-Study or PRR] process. The Self-Study process was notably inclusive.

To recognize the institution's progress to date. This is recognition for institutions that had serious challenges or problems but have made significant progress.

Affirming Actions

Grant Candidate for Accreditation Status: This is a pre-accreditation status following a specified process for application and institutional self-study. For details about the application process, see the MSCHE publication, *Becoming Accredited*. The U.S. Department of Education labels Candidacy as "Pre-accreditation" and defines it as the status of public recognition that an accrediting agency grants to an institution or program for a limited period of time that signifies the agency has determined that the institution or program is progressing toward accreditation but is not assured of accreditation) before the expiration of that limited period of time. Upon a grant of candidate for accreditation status, the institution may be asked to submit additional Accreditation Readiness Reports until it is ready to initiate self study.

Grant Accreditation: The Commission has acted to grant accreditation to a Candidate institution and does not require the submission of a written report prior to the next scheduled accreditation review in five years.

Grant Accreditation and request a Progress Report or Monitoring Report: The Commission has acted to grant accreditation

II.2.2. PROFESSIONAL DEGREE AND CURRICULUM

The academic program of the School consists in a Professional Bachelor Degree in Architecture of five (5) years and one hundred and ninety two credits (192); divided in seven (7) semesters of eighteen (18) credits each, three (3) semesters of nineteen (19) credits each, a summer of six (6) credits, and a summer of three (3) credits. The total of credits are subdivided in fifty (50) credits of Architectural Design Development Studios, ten (10) credits on Architectural Representation Laboratories, sixty nine (69) credits in Professional Concentration Courses, nine (9) credits in Elective Courses (mandatory selection inside the Experimental Units), and fifty four (54) credits in General Education Courses. Non pre-requisite degree(s) or other preparatory education is required for completing the program.

In order to present a clear academic path, the curriculum has been designed in platforms, or investigative areas, that require the development of the essential skills for the program to be completed successfully; the following descriptions will provide details and ideas about each one of them:

The offer from the Architectural Design Development Studios (ARAD) blends the technological platform to the actual execution of the architectural discipline; they are the foundation of the program as long as each one is tested from a particular point of view. Each studio counts five (5) credits and coexists with an emphasized Laboratory in the principles of Architectural Representation (ARAR) of one (1) credit. With this educational podium we are creating a new generation of Architects capable to compete in a global market, and able to accomplish huge contributions to our cities development. The Studios are offered by a Design Instructor, and the Laboratory by a Digital Design Consultant so students can develop the skills acquired in previous ones. The purpose of the Consultant is to answer questions about the software and/or computer programs to facilitate the students' accomplishment of the goals established by the Instructor on each session.

The platform of Professional Concentration Courses is organized per Experimental Units. Each Unit provides a complete and cohesive education, interlacing the necessary disciplines in order to assure the Architect is able to operate on the highest level of competitiveness and expertise. Each course counts for three (3) credits, and eight (8) of the nine Units have three courses; the first one focus on theoretical aspects, the second in providing substance and critical analysis, and the third one in discussing implementation strategies.

The Program requires the acquisition of a Minor Degree by completing twenty four (24) credits or more in one of the nine Experimental Units, which in turn correspond to specific colleges within the Institution. The curriculum provides the students enrolled with at least fifteen (15) Professional Concentration credits on each Unit. The Minor Degree requirement is completed by acquiring nine Elective Courses credits on the same Unit of the student's choice, therefore, completing the criteria established earlier. This is another opportunity for the students to be involved in the interdisciplinary debates, typical of the professional ambits.

The General Education Courses provide basic compulsory education to obtain a degree at any institution. These courses are standard with other Bachelor Degrees at the Pontifical Catholic University of Puerto Rico.

CURRICULAR STRUCTURE

The curricular program and sequence provided by the School of Architecture of the Pontifical Catholic University of Puerto Rico have been established in a coherent method after a logical analysis of architectural and pedagogical models. It was taken into consideration both, the academic load and the practical methodology of disciplinary instruction. For these reasons, an effective and capable structure has been proposed according to the real necessities of the social and civic characters of our metropolis in the South and West Regions of Puerto Rico. By providing these parameters, students are able to obtain continuity on their learning process for an easier adaptation/integration to the professional realm. The following is an illustration of the curricular sequence structured in our offer for an innovative architectural academic program. The listed courses have been organized in an ideal semester suggestion. They are shown in a descriptive pattern beginning with the denomination, number, title, prerequisites (between parenthesis), and amount of credits.

FIRST YEAR CURRICULUM

First Semester	Cr.	Second Semester	Cr.
ARAD 101 <i>Architectural Design Fundamentals I</i> (Prereqs.: None)	5	ARAD 102 <i>Architectural Design Fundamentals II</i> (Prereqs.: ARAD/ARAR 101)	5
ARAR 101 (Laboratory) <i>Diagramming and Representation Techniques</i> (Prereqs.: None)	1	ARAR 102 (Laboratory) <i>Nonlinear Diagramming and Complex Geometry</i> (Prereqs.: ARAD/ARAR 101)	1
ARHT 101 <i>Architectural History I: Ancient to Renaissance</i> (Prereqs.: None)	3	ARAC 101 <i>Fundamentals of Historic Preservation and Conservation</i> (Prereqs.: None)	3
SPAN 141 <i>Oral and Written Communication I</i>	3	SPAN 142 <i>Oral and Written Communication II</i> (Prereqs.: SPAN 141)	3
ENGL 115 <i>Oral Communication and Listening Comprehension</i>	3	ENGL 201 <i>Basic Principles of Reading and Writing</i> (Prereqs.: ENGL 115)	3
MATH 143 <i>Integrated Algebra and Trigonometry</i>	3	MATH 271 <i>Calculus I</i> (Prereqs.: MATH 143)	4
ORIE 003 <i>Orientation</i>	0	ORIE 004 <i>Orientation</i> (Prereqs.: ORIE 003)	0
Total	18	Total	19

FIRST YEAR SUMMER

	Cr.
ART 101 <i>Art Appreciation</i>	3
MUSI 102 <i>Musical Appreciation</i>	3
Total	6

SECOND YEAR CURRICULUM

First Semester	Cr.	Second Semester	Cr.
ARAD 201 <i>Analytical Design Studio I: History and Theory</i> (Prereqs.: ARAD/ARAR 102, ARHT 101)	5	ARAD 202 <i>Analytical Design Studio II: Adaptive Conservation and Preservation</i> (Prereqs.: ARAD/ARAR 201, ARAC 101)	5
ARAR 201 (Laboratory) <i>Historical Documentation and Representation Techniques</i> (Prereqs.: ARAD/ARAR 102, ARHT 101)	1	ARAR 202 (Laboratory) <i>Dynamic Imaging and Documentation</i> (Prereqs.: ARAD/ARAR 201, ARAC 101)	1
ARHT 201 <i>Architectural History II: Baroque to Contemporary Western Civilization</i> (Prereqs.: ARHT 101)	3	ARAC 201 <i>Preservation Techniques, Methods and Strategies for Building Systems</i> (Prerequisites: ARAC 101)	3

ARST 101 <i>Tectonics on Material Applications and Methods</i> (Prereqs.: ARAD/ARAR 101)	3	ARSF 101 <i>Architectural Structures I: Static and Strengths</i> (Prereqs.: PHYS 217)	3
PHYS 217 <i>Physics for Architects</i> (Prereqs.: MATH 143)	3	PHIL 207 <i>Elementary Logic</i>	3
SOCI 110 <i>Introduction to the Social Sciences: Social and Cultural Aspects</i>	3	HIST 104 <i>Western Civilization II</i>	3
PHED 107 <i>Health and Physical Fitness</i>	1	PHED ____ <i>(Elective)</i>	1
Total	19	Total	19

THIRD YEAR CURRICULUM

First Semester	Cr.	Second Semester	Cr.
ARAD 301 <i>Experimental Design Studio I: Sustainability and Technologies</i> (Prereqs.: ARAD/ARAR 202, ARST 101)	5	ARAD 302 <i>Experimental Design Studio II: Structural Framework and Assemblage</i> (Prereqs.: ARAD/ARAR 301, ARSF 101)	5
ARAR 301 (Laboratory) <i>Parametric Modeling</i> (Prereqs.: ARAD/ARAR 202, ARST 101)	1	ARAR 302 (Laboratory) <i>Parametric Detailing</i> (Prereqs.: ARAD/ARAR 301, ARSF 101)	1
ARST 201 <i>Introduction to Mechanical and Electrical Systems</i> (Prereqs.: ARST 101)	3	ARSF 201 <i>Architectural Structures II: Composite Construction on Wood and Steel</i> (Prereqs.: ARSF 101)	3
ARLE 101 <i>Built Environment and Culture in the History of Landscape Architecture</i> (Prereqs.: ARHT 201)	3	ARUS 101 <i>Theory and Principles of Urban Design</i> (Prereqs.: ARHT 201)	3
ARLA 101 <i>Introduction to Law, Contracts and Professional Liability</i> (Prereqs.: ARHT 101)	3	ARDA 101 <i>Entrepreneurship on Developmental Politics</i> (Prereqs.: ARLA 101)	3
THEO 130 <i>The Divine Revelation</i>	3	THEO 131 <i>The Church of Christ</i>	3
Total	18	Total	18

FOURTH YEAR CURRICULUM

First Semester	Cr.	Second Semester	Cr.
ARAD 401 <i>Contextual Design Studio I: Landscape, Ecology and Environment</i> (Prereqs.: ARAD/ARAR 302, ARLE 101)	5	ARAD 402 <i>Contextual Design Studio II: Urban Scapes and Communities</i> (Prereqs.: ARAD/ARAR 401, ARUS 101)	5
ARAR 401 (Laboratory) <i>Scripting and Procedural Morphology</i> (Prereqs.: ARAD/ARAR 302, ARLE 101)	1	ARAR 402 (Laboratory) <i>Territorial, Urban and Infrastructural Data Analysis</i> (Prereqs.: ARAD/ARAR 401, ARUS 101)	1

ARLE 201 <i>Environment Construction Processes, Materials and Techniques</i> (Prereqs.: ARLE 101)	3	ARUS 201 <i>Territorial and Urban Public Policy in a Global Society</i> (Prereqs.: ARUS 101)	3
ARHT 301 <i>Architectural History III: Latin America and Puerto Rico</i> (Prereqs.: ARHT 201)	3	ARAC 301 <i>Conservation Planning Strategies and Policies</i> (Prerequisites: ARAC 201)	3
ARST 301 <i>Building Acoustics, Illumination, and Special Systems</i> (Prereqs.: ARST 201)	3	ARSF 301 <i>Architectural Structures III: Monolithic Construction on Masonry and Concrete</i> (Prereqs.: ARSF 201)	3
ARLA 201 <i>Professional Practice and Contractual Procedures in Architecture</i> (Prereqs.: ARLA 101)	3	ARDA 201 <i>Economic Feasibility and Finances in Real Estate</i> (Prereqs.: ARDA 101)	3
Total	18	Total	18

FOURTH YEAR SUMMER

	Cr.
Elective <i>Experimental Unit or selected PCUPR courses</i>	3
Total	3

FIFTH YEAR CURRICULUM

First Semester	Cr.	Second Semester	Cr.
ARAD 410 <i>Developmental Design Studio I: Legal and Administrative Awareness</i> (Prereqs.: ARAD/ARAR 402, ARLA 101)	5	ARAD 420 <i>Developmental Design Studio II: Development Assessment, Entrepreneurship and Feasibility</i> (Prereqs.: ARAD/ARAR 410, ARDA 101)	5
ARAR 410 (Laboratory) <i>Independent Research</i> (Prereqs.: ARAD/ARAR 402, ARLA 101)	1	ARAR 420 (Laboratory) <i>Independent Research II</i> (Prereqs.: ARAD/ARAR 410, ARDA 101)	1
ARLE 301 <i>Ecological Principles in the Built Environment</i> (Prereqs.: ARLE 201)	3	ARDA 301 <i>Marketing and Branding through Commercial Communication Skills</i> (Prereqs.: ARDA 201)	3
THEO 132 <i>The Christian Family</i>	3	ARUS 301 <i>Territorial Planning Strategies on Infrastructures and Communities</i> (Prereqs.: ARUS 201)	3
PHIL 312 <i>Philosophy of Man</i>	3	PHIL 340 <i>Ethics - Philosophy of Human Behavior</i>	3
Elective <i>Experimental Unit or selected PCUPR courses</i>	3	Elective <i>Experimental Unit or selected PCUPR courses</i>	3
Total	18	Total	18

MINOR DEGREE SPECIALIZATION AND DIRECTED ELECTIVES

Responding to our mission of a multi-disciplinary education, the Elective Courses platform combines an internal (within the School) and external (within the institution) offer. As an example of possible academic paths, we present alternative combinations in pursuing a Minor Degree. These courses are presented by University Colleges and/or Departments, and they are part of the current institutional offer. The purpose of the interdepartmental alliances is to promote the trans-disciplinary experience of our students and propel the crosspollination of knowledge, research and applications. There is also the alternative of pursuing the minor degree with the internal courses offer. The offers, from which the students choose three (3) courses, are as follows:

ARCHITECTURAL REPRESENTATION MINOR DEGREE	
In Collaboration with the College of Arts & Humanities (Department of Fine Arts)	
Selected Courses within PCUPR	Cr.
ART 104 Fundamentals of Color and Design	3
ART 240 Painting I	3
ART 241 Painting II	3
ART 271 Advanced Photography	3
ART 272 Digital Photography	3
ART 280 Digital Typography	3
ART 281 Digitalized Typography Projects	3
ART 340 Contemporary Concepts and New Forms	3
ART 350 Advanced Drawing	3
ART 362 Sculpture I	3
ART 363 Silkscreen	3
ART 372 Sculpture II	3
ART 383 Digitalized Tridimensional Illustration and Animation	3
ART 462 Constructivist Sculpture	3
ART 491 Advanced Projects in Painting and Drawing	3
Elective Courses within School of Architecture	
ARAR 404 Cognition, Perception and Representation of Form and Space	3
ARAR 405 Architectural Fabrication Studio I	3
ARAR 406 Graphic Design: Concept and Technique	3

HISTORY AND THEORY MINOR DEGREE	
In collaboration with the College of Arts and Humanities (Department of History)	
Selected Courses within PCUPR	Cr.
HIST 206 History of Ponce	3
HIST 263 History of Spain	3
HIST 265 History of the Church	3
HIST 303 United States History (Compendium)	3
HIST 360 Puerto Rican Society and Culture in the 20th Century	3
HIST 370 The Caribbean	3

HIST 405 The French Revolution and the Napoleon Era (1789-1815)	3
HIST 408 History of Russia: Origin, Formation, and Evolution of the Russian People	3
HIST 409 History of the Far East: China and Japan	3
HIST 410 XIX Century Europe	3
Elective Courses within School of Architecture	
ARHT 401 Contemporary Architectural Theory and Discourse	3
ARHT 402 Emergent Practices and New Architectural Paradigms	3
ARHT 403 Philosophy of Science and Technology	3

ADAPTIVE CONSERVATION AND PRESERVATION MINOR DEGREE In collaboration with the College of Arts and Humanities (Department of History)	
Selected Courses within PCUPR	Cr.
HIST 403 Society and Culture of Contemporary Europe (Cultural Trip Abroad)	6
HIST 417 Historiography	3
HIST 419 Methodology and Techniques of Historical Investigation	3
HIST 420 Seminar on Historic Investigation	3
Elective Courses within School of Architecture	
ARAC 401 The Economics of Historic Preservation	3
ARAC 402 Cultural and Heritage Tourism	3
ARAC 403 Advanced Preservation Research Strategies	3
ARAC 430 In the Path of Lime	3

SUSTAINABILITY AND TECHNOLOGIES MINOR DEGREE In collaboration with the College of Sciences (Department of Environmental Sciences, and Department of Physics and Mathematics)	
Selected Courses within PCUPR	Cr.
ENSC 350 Environmental Problems and Management	4
ENSC 440 Hazardous and Non Hazardous Solid Wastes	3
ENSC 450 Water Processing Systems	3
ENSC 451 Air Pollution	3
PHYS 325 Energy and the Environment	3
Elective Courses within School of Architecture	
ARST 401 Sustainable Building Design Philosophy and Practices	3
ARST 402 Aesthetics of Sustainable Building Design	3
ARST 403 Sustainable Design Rating Systems and Efficiency Standards	3

STRUCTURAL FRAMEWORK AND ASSEMBLAGES MINOR DEGREE In collaboration with the College of Sciences (Department of Physics & Mathematics)	
Selected Courses within PCUPR	Cr.
MATH 272 Calculus II	4
MATH 373 Calculus III	4
MATH 391 Differential Equations	3
PHYS 221 Physics I	4
PHYS 221 Physics II	4
Elective Courses within School of Architecture	
ARSF 401 New Structural Systems and Building Envelope	3
ARSF 402 Tensile, Dome and Shell Structures	3
ARSF 403 Complexities and Symbolism on High Technology Buildings	3

LANDSCAPE, ECOLOGY AND ENVIRONMENT MINOR DEGREE In collaboration with the College of Sciences (Department of Biology)	
Selected Courses within PCUPR	Cr.
BIOL 201 Ecology for Tourism I	3
BIOL 202 Ecology for Tourism II	3
BIOL 222 Botany	3
BIOL 340 Ecology	3
BIOL 429 Ecosystems of Puerto Rico	4
BIOL 431 Marine Biology	4
Elective Courses within School of Architecture	
ARLE 401 Urban Ecology	3
ARLE 402 Planting Materials in Landscape Design	3
ARLE 403 Advanced Landscape Architectural Design	3

URBAN SCAPES AND COMMUNITIES MINOR DEGREE In collaboration with the College of Arts and Humanities (Department of Social Sciences)	
Selected Courses within PCUPR	Cr.
PUAD 230 Municipal Governments	3
PUAD 265 Public Administration	3
PUAD 355 Policy Analysis	3
PUAD 373 Ethics and Public Administration	3
PUAD 384 Fiscal Politics and Budget	3
PUAD 385 Public Finance, Fiscal Policy, and Budgeting	3
SOCI 213 Fundamental Sociology (Compendium)	3
SOCI 218 Statistical Methods in Social Science	3
SOCI 303 Economic Principles and Problems	3
SOCI 305 Social Research	3
SOCI 314 Social Problems	3
SOCI 325 Cultural Anthropology	3

SOCI 405 Demography	3
SOCI 440 In Learning Service	3
Elective Courses within School of Architecture	
ARUS 401 Studies on Emergent Urban Practices	3
ARUS 402 Urban Economic and Financial Milieu	3
ARUS 403 Urban Sociology and the Cultures of Cities	3

LEGAL AND ADMINISTRATIVE AWARENESS MINOR DEGREE In collaboration with the College of Arts and Humanities (Department of Social Sciences), and the College of Business Administration (Department of Management, and Department of Business Law)	
Selected Courses within PCUPR	Cr.
PUAD 390 Administrative Law	3
POSC 221 International Organizations and Politics	3
POSC 325 Public International Law	3
POSC 329 Constitutional Law	3
PRLS 207 Introduction to Pre-Law Studies	3
PRLS 300 Seminar on Academic Aptitude Test	3
PRLS 307 Legal Research	3
PRLS 400 Open Seminar	3
MGNT 313 Business Law	3
BLAW 315 Corporations	3
BLAW 317 Consumer Law	3
BLAW 410 Environmental Law	3
Elective Courses within School of Architecture	
ARLA 401 Human Resources on Strategic Administration	3
ARLA 402 Development of Business Plans	3
ARLA 403 Administrative Initiatives	3

DEVELOPMENT ASSESSMENT, ENTREPRENEURSHIP AND FEASIBILITY MINOR DEGREE In collaboration with the College of Business Administration (Department of Managerial Economics, Department of Finance, and Department of Management)	
Selected Courses within PCUPR	Cr.
ECON 201 Fundamentals and Applications of Economics I	3
ECON 202 Fundamentals and Applications of Economics II	3
ECON 304 Economic Development of Puerto Rico	3
ECON 426 International Economics	3
FINA 301 Risk and Insurance Management	3
FINA 302 Real Estate	3
FINA 405 Real Estate Appraisal	3
MGNT 202 Small Business Administration	3
MGNT 210 Organizational Behavior	3
MGNT 230 Entrepreneurship	3

MGNT 250 Entrepreneurial Creativity and Innovation	3
Elective Courses within School of Architecture	
ARDA 401 Strategic Administration	3
ARDA 402 Public Private Partnerships and the Port of the Americas	3
ARDA 403 Value and Appraisal of Land	3

MINIMUM NUMBER OF SEMESTER CREDIT HOURS

For the minimum number of semester credit hours, see the *Curricular Framework* previously established in this section.

COURSES AND CREDIT HOURS

The minimum credit-hour requirement for the Bachelor of Architecture Degree is 192 credits. The full spectrum of the credit requirements can be categorized into five main categories: Architectural Design Development Studios, Architectural Representation Laboratories, Professional Concentration Courses, Elective Courses, and General Education Courses.

ARCHITECTURAL DESIGN DEVELOPMENT STUDIOS Professional Studies (Courses with architectural content required of all students)	
Course	Cr.
ARAD 101 Architectural Design Fundamentals I	5
ARAD 102 Architectural Design Fundamentals II	5
ARAD 201 Analytical Design Studio I: History and Theory	5
ARAD 202 Analytical Design Studio II: Adaptive Conservation and Presentation	5
ARAD 301 Experimental Design Studio I: Sustainability and Technologies	5
ARAD 302 Experimental Design Studio II: Structural Framework and Assemblages	5
ARAD 401 Contextual Design Studio I: Landscape, Ecology and Environment	5
ARAD 402 Contextual Design Studio II: Urban Scapes and Communities	5
ARAD 410 Developmental Design Studio I: Legal and Administrative Awareness	5
ARAD 420 Developmental Design Studio II: Development Assessment, Entrepreneurship and Feasibility	5
Total	50

ARCHITECTURAL REPRESENTATION LABORATORIES

Professional Studies (Courses with architectural content required of all students)

Course	Cr.
ARAR 101 Diagramming and Representation Techniques	1
ARAR 102 Nonlinear Diagramming and Complex Geometry	1
ARAR 201 Historical Documentation and Representation Techniques	1
ARAR 202 Dynamic Imaging and Documentation	1
ARAR 301 Parametric Modeling	1
ARAR 302 Parametric Detailing	1
ARAR 401 Scripting and Procedural Morphology	1
ARAR 402 Territorial, Urban and Infrastructural Data Analysis	1
ARAR 410 Independent Research	1
ARAR 420 Independent Research II	1
Total	10

PROFESSIONAL CONCENTRATION COURSES

Professional Studies (Courses with architectural content required of all students)

Course	Cr.
ARAC 101 Fundamentals of Historic Preservation and Conservation	3
ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems	3
ARAC 301 Conservation Planning Strategies and Policies	3
ARDA 101 Entrepreneurship on Developmental Politics	3
ARDA 201 Economic Feasibility and Finances in Real State	3
ARDA 301 Marketing and Branding through Commercial Communication Skills	3
ARHT 101 Architectural History I: Ancient to Renaissance	3
ARHT 201 Architectural History II: Baroque to Contemporary Western Civilization	3
ARHT 301 Architectural History III: Latin America and Puerto Rico	3
ARLA 101 Introduction to Law, Contracts and Professional Liability	3
ARLA 201 Professional Practice and Contractual Procedures in Architecture	3
ARLE 101 Built Environment and Culture in the History of Landscape Architecture	3
ARLE 201 Environment Construction Processes, Materials and Techniques	3
ARLE 301 Ecological Principles in the Built Environment	3
ARSF 101 Architectural Structures I: Static and Strengths	3
ARSF 201 Architectural Structures II: Composite Construction on Wood and Steel	3
ARSF 301 Architectural Structures III: Monolithic Construction on Masonry and Concrete	3
ARST 101 Tectonics on Material Applications and Methods	3
ARST 201 Introduction to Mechanical and Electrical Systems	3
ARST 301 Building Acoustics, Illumination, and Special Systems	3
ARUS 101 Theory and Principles of Urban Design	3
ARUS 201 Territorial and Urban Public Policy in a Global Society	3
ARUS 301 Territorial Planning Strategies on Infrastructures and Communities	3
Total	69

ELECTIVE COURSES	
General Studies (Elective courses with other than architectural content)	
Course	Cr.
Elective	3
Elective	3
Elective	3
Total (minimum)	9

GENERAL EDUCATION COURSES	
General Studies (Required courses with other than architectural content)	
Course	Cr.
SPAN 141 Oral and Written Communication I	3
SPAN 142 Oral and Written Communication II	3
ENGL 115 Oral Communication and Listening Comprehension	3
ENGL 201 Basic Principles of Reading and Writing	3
MATH 143 Integrated Algebra and Trigonometry	3
MATH 271 Calculus I	4
PHYS 217 Physics for Architects	3
ART 101 Art Appreciation	3
MUSI 102 Musical Appreciation	3
SOCI 110 Introduction to the Social Sciences: Social and Cultural Aspects	3
HIST 104 Western Civilization II	3
PHIL 207 Elementary Logic	3
PHIL 312 Philosophy of Man	3
PHIL 340 Ethics - Philosophy of Human Behavior	3
THEO 130 The Divine Revelation	3
THEO 131 The Church of Christ	3
THEO 132 The Christian Family	3
PHED 107 Health and Physical Fitness	1
PHED ____ (Elective)	1
ORIE 003 Orientation	0
ORIE 004 Orientation	0
Total	54

OFF-CAMPUS PROGRAMS FACILITIES AND RESOURCES

As previously stated in the History of the Program, the School is intensively working towards increasing its international exchanges offerings. Some of our students have already participated for a semester in exchanges with the Architecture Departments of the Pontifical Catholic University of Rio Grande do Sul, located in Brazil, and the Pontifical Catholic University of Chile. We are currently establishing alliances with universities in Spain.

In terms of exposing students to a broader cultural diversity experience, a Semester of Studies in New York (SENY, for its Spanish acronym) was established for the fall of 2013. A group of 13 students participated in a program housed in the facilities of Hunter College of the City University of New York. The experience provided the opportunity for our students to design projects in a completely different context to their usual. They also had the opportunity to present their architecture and urban design solutions to the respective residents, especially to Puerto Rican community leaders.

The aforementioned initiatives and the continuous interest from our students to expand their geographical boundaries, have given way to begin the process of establishing a fixed location for the School's first Off-Campus Program. For this purpose, the School and the Institutional Office for International Relations are managing the signing of a Memorandum of Understanding (MOU) between the PCUPR and the Catholic University Redemptories Mater in Managua, Nicaragua. The host university will become an abroad Historical Preservation Laboratory for our Program providing a new context for analysis, guest faculty, computer laboratory, and one classroom. The courses planned to be taught are to be chosen from:

- ARAC 101 Fundamentals of Historic Preservation and Conservation
- ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems
- ARAC 301 Conservation Planning Strategies and Policies
- ARAC 401 The Economics of Historic Preservation
- ARAC 402 Cultural and Heritage Tourism
- ARAC 403 Advanced Preservation Research Strategies
- ARAC 430 In the Path of Lime
- ARST 101 Tectonics on Material Applications and Methods

This off-campus course offering will begin as a summer program of one term.

II.2.3. CURRICULUM REVIEW AND DEVELOPMENT

The academic program of the School has established a curricular review process, in accordance with the regulations established by the University, by instituting a Departmental Curricular Committee. This committee is represented by the various sectors of the architectural discipline, and composed by the Library Director, Operations Coordinator, the Experimental Units Coordinators, and the Capstone Coordinator. Together, they collaborate with the Dean, Associate Dean and Program Director in the review and updating of curriculum, identification of human and fiscal resources, and the development of research and field experiences.

The committee is charged with making recommendations towards Students Performance Criteria and thematic elements to be adjusted in the curriculum. As for the system of educational environment in the School, the Program Director contributes its expertise to competitiveness in the exercise of academic practice. From the decisions made, both the nine Experimental Units Coordinators and the Capstone Coordinator work with faculty after the goal that every working platform in the School reaches a privileged position in philosophical and practical discourse of the profession.

For this extent, the composition of the committee includes a range of professionals from both the academic and practice realms. It includes members from the full time academic community, six (6) licensed architects, and representatives from the Landscape Architecture, Law and Business Administration disciplines. This composition provides a broad perspective into the challenges of the continual development of the curriculum.

II.3. EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION

Section does not apply.

II.4. PUBLIC INFORMATION

II.4.1. STATEMENT ON NAAB–ACCREDITED DEGREES

The PCUPR School of Architecture provides, as required, the Statement on NAAB Accredited degrees within the School's website (www.pucpr.edu/arquitectura) under the "NAAB" Tab. The statement reads:

"In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency

authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree. The NAAB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicates that a program should be accredited within 6 years of achieving candidacy, if its plan is properly implemented. In order to meet the education requirement set forth by the National Council of Architectural Registration Boards, an applicant for an NCARB Certificate must hold a professional degree in architecture from a program accredited by the NAAB; the degree must have been awarded not more than two years prior to initial accreditation. However, meeting the education requirement for the NCARB Certificate may not be equivalent to meeting the education requirement for registration in a specific jurisdiction. Please contact NCARB for more information. The Pontifical Catholic University, School of Architecture was granted candidacy for the following professional degree program in architecture: B.Arch (192 credits)”

II.4.2. ACCESS TO NAAB CONDITIONS AND PROCEDURES

NAAB 2009 Conditions for Accreditation and 2012 Procedures for Accreditation are available for viewing and download from the School of Architecture’s website (www.pucpr.edu/arquitectura) under the “NAAB” Tab.

The direct URL for accessing the document is:
http://www.pucpr.edu/arquitectura/?page_id=1907.

Printed copies of the documents are also available in the CARIBET Library.

II.4.3. ACCESS TO CAREER DEVELOPMENT INFORMATION

In order to assist parents, students and others as they seek to develop an understanding of the larger context for architecture education and career pathways available to graduates, the PCUPR School of Architecture provides career development information for viewing and download from its website (www.pucpr.edu/arquitectura) under the “NAAB” Tab.

The direct URL for accessing the document is:
http://www.pucpr.edu/arquitectura/?page_id=1907.

II.4.4. PUBLIC ACCESS TO APR'S AND VTR'S

PCUPR School of Architecture APR and VTR documents are available for viewing and download from the School of Architecture's website (www.pucpr.edu/arquitectura) under the "NAAB" Tab.

The direct URL for accessing the document is:
http://www.pucpr.edu/arquitectura/?page_id=1907.

Printed copies of the documents are also available in the CARIBET Library.

II.4.5. ARE PASS RATES

The latest NCARB Architectural Examination Examination (ARE) Pass Rates document is available for viewing and downloads from the School of Architecture's website (www.pucpr.edu/arquitectura) under the "NAAB" Tab.

The direct URL for accessing the document is:
http://www.pucpr.edu/arquitectura/?page_id=1907.

III. PART THREE: PROGRESS SINCE LAST SITE VISIT (2013 VTR-CC)

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III.1. SUMMARY OF RESPONSES TO THE TEAM FINDINGS

III.1.1. RESPONSE TO CONDITIONS NOT MET/NOT-YET-MET

Documenting the progress since the last site visit, the following is the summary of responses to the team findings as established in the 2013 Visiting Team Report (VTR). The team found a total of 13 Student Performance Criteria (SPC) not yet met, as the curricular program and all of its courses were not being offered at the time. The School's responses are presented by SPC:

- A.9 Historical Traditions and Global Culture – After the team assessment was received in the VTR, the Program Director established a series of monthly meetings with the Faculty in charge of the corresponding courses. The courses contents were revised and expanded to strengthen students' understanding of non-Western architectural traditions.
- B.1 Pre-Design – As only one course from the curricular sequence in compliance with this SPC was available at the time of the previous visit, the evidence may have been perceived as insufficient or unavailable. For the Initial Accreditation visit the evidence of students-produced programs will be available in the team room.
- B.2 Accessibility, B.5 Life Safety, and B.9 Structural Systems – our understanding at the time of the last site visit was that the Program was already in compliance with these SPCs, but probably the evidence was not that clear. The Experimental Units Coordinators had multiple meetings with their respective faculty to assure that as part of the project presentations more specific evidence on these SPC is included.
- B.6 Comprehensive Design, B.7 Financial Considerations, C.4 Project Management, and C.5 Practice Management – At the time of the last site visit, the courses responsible to comply with these SPCs were not being taught yet.
- B.10 Building Envelope Systems, C.3 Client Role in Architecture, and C.6 Leadership – For these SPCs the Program revised the matrix to have Architectural Design Development Studios, not theory course, in charge of producing the necessary evidence.
- C.8 Ethics and Professional Judgment – The Program recruited new faculty to refocus the courses to appropriately cover this SPC.

III.1.2. RESPONSE TO CAUSES FOR CONCERN

A. Impact of the high number of credits on program cost and time to graduation

We are aware and in agreement that the credit load of our Program exceeds the National average for similar academic offers, PCUPR School of Architecture believes that the reason lies in:

- The fact that General Education course requirement in our Institution is 54 credits. The PCUPR, as a faith-based educational institution, has Philosophy and Theology courses (a total of 18 credits) as part of its basic academic requirements. It might be true that in our case this condition, that is true for all the PCUPR Programs, creates an additional course load to an already loaded academic offer, but on the other hand we also believe that these courses contribute greatly to the development of ethical and morally rounded individuals with a holistic education. Nonetheless we, in conjunction with the applicable entities within the university structure, are exploring the possibility of refocusing some of our courses, so that they cover those subjects within the General Courses as to relieve our students from that requirement and reduce the overall credit load. As the first positive result of part of this effort, our University already approved to consider the exclusion of two (2) general education courses for a total of seven (7) less credits.
- The fact that our Academic Program structure includes nine (9) autonomous academic entities, or Experimental Units. Even though we strongly support this approach and it has proven to have great benefits, the reality is that it may provide a level of “redundancy” or repetition of similar subject matter in some courses. To properly address this situation, Dean Badillo proposes to either consolidate some of the Experimental Units or consolidate some of the courses in pursuit of a leaner Program.
- The fact that Institutional Curriculum Revision has not occurred, but is planned, and which could provide the above mentioned goals to be adopted in a near future. The PCUPR School of Architecture, by recommendation of Dean Badillo, will designate a committee to prepare specific recommendations to advance this goal.

B. Physical separation and scheduling differences between the school and the main campus

The physical distance between our School and our main Campus is about 0.75 miles. This is a reality that cannot be argued, and it has its benefits and its challenges. Dean Badillo and the University authorities are exploring the viability to establish a shuttle service connecting both locations for the academic community. In addition, we have been working around the students' courses schedule in order to minimize possible conflicts that might prevent them from comfortably and appropriately getting to their classes on time. Most of the general education courses taught at the main campus are scheduled during Tuesdays and Thursdays, when our students do not have the Design Studios, neither the Concentration courses at the School.

Nevertheless, throughout the years since our School's foundation, and also since the last NAAB visit, the institutional distance has been steadily reducing and it is close to almost disappearing. Today our students have available a total 110 courses at the main campus that they can take as elective courses for completing their minor degrees. This number is a significant increment compared to the 60 available courses for the last NAAB visit in 2013 (see below, item E). This single initiative constitutes a natural and constant opportunity for our students to fully participate of the main campus university life and activities.

In addition to all of the above, with the clear intention to strengthen our ties with the University's main campus, since last NAAB visit our School has been actively participating at the same level of intensity, as the rest of the institutional community, in almost all governance, faculty and students committees, and organizations that can be of two kinds: mandatory or voluntary.

Institutional/Mandatory:

- The Dean is a member of:
 1. University Board
 2. Institutional Curriculum Committee
 3. University Senate
 4. Academic Council
 5. Infrastructure Committee
- The Program Director is a member of:
 1. Institutional Assessment Committee
 2. Service Office for Persons with Disabilities Committee
 3. Institutional Enrollment Committee

4. MSCHE Self Study Committee
 - The Library Director is a member of:
 1. Pastoral Committee
 - The Regent for Events and Public Relations is a member of:
 1. Retention Committee
 2. Interdisciplinary Dialogs Committee

Also, we have one student as a representative member of the School in the Academic Senate, and all our students organizations (AIAS, USGBC, MAS, and LINEA) are registered and affiliated to the Students Affair Vice-Presidency.

Extracurricular/Voluntary Activities:

- The Dean has to participate as:
 1. Speaker of the University's Full Time Faculty Assembly
 2. Speaker at the presentation of Architect Segundo Cardona's work. This activity was coordinated by the University's Central Administration and took place at the main campus
- The Program Director is participating in:
 1. At the request of the President of the University, he provided assistance to the Institutional Department of Infrastructure in the visual examination and documentation of physical problems at the Damián Abajo School in the town of Orocovis. This was part of an initiative of community assistance from the University to community schools in Puerto Rico.
 2. He was appointed to the Evaluation Committee of the Academia Santa María Reina of Ponce, recommended by its Committee of Parents, with the task of doing a visual evaluation and documentation of the physical condition of the school. The creation of the committee was the suggestion of the President of the University to assess the possibility that the PCUPR could attend to the needs of the academy that in the past was part of the Institution.
 3. At the request of the President of the University, he has offered assistance to the Institution in the curriculum design and feasibility analysis of new academic programs for other faculties. These include programs in Graphic Design and Film, for the College of Business Administration, and a Fashion Design program for the College of Education.
 4. He has represented the University offering recent lectures in Puerto Rico, and the states of Texas and Orlando; moreover, in recent international conferences held in Mexico and Panamá.

5. For five consecutive years, he has attended and sponsored the intramural tournament of the School of Architecture held at the PCUPR Sports Complex in the main campus, for which students and faculty member from other programs of the Institution are invited.
- Professor Agamemnon G. Pantel, PhD is participating as:
 1. Speaker at the 500 Santa Teresa de Jesús Anniversary commemorative activities.
- Professor Luis Ayala-Rubio is participating as:
 1. Architect for the PCUPR New Theater and also the New School of Music, both located at the main campus.
- Our Students are participating in:
 1. Héctor Cosme, Ramón González, and Jesús Meléndez are part of the University Band.
 2. José Collazo and Bridgette Rivera are part of the University Chorus.
 3. David Pacheco, Gabriel Ríos and Jan Valentín are members of the University Baseball Team.

In addition to the above, our students participate regularly in IDEA, a students oriented creative entrepreneurial initiatives competition which is organized by the Business Administration College of the PCUPR open to all university students.

C. Lack of full-time or ongoing faculty positions

Presently (at the moment we are working on this APR) our School does not have any faculty member dedicated exclusively (100%) to instructional duties, except for our Librarian which is considered a Full time Faculty. In addition to her, our Program Director, who is also full time, divides his time 60% for administrative work and the remaining balance of 40% is dedicated to instructional duties. Our former Associate Dean, Luz M. Rodriguez-López, Ph.D., is also a full time Faculty who also divides her time 60% for administrative and 40% for instructional duties.

By the time of the NAAB Initial Accreditation Visit next semester (Fall 2015) we are forecasting the inclusion of our first full time faculty member who will be assigned exclusively to academic responsibilities.

Nonetheless, our adjunct faculty has demonstrated its commitment and their loyalty to our School since the vast majority of them have remained contributing through the years. We hope to, once the Initial Accreditation

process concludes, be able to offer to this group of dedicated professionals more time and more stability.

D. The School does not clearly articulate how knowledge and skills introduced by each Experimental Unit will be reinforced in later studies

Our School has made improvements to course and faculty evaluations with the intention of identifying, and putting in place, specific strategies to address this concern. Below we provide the strategies being implemented:

- Refocusing 1st year Design Studios ARAD 101 and 102 in order to initiate our students in understanding the profession fundamentals at an earlier stage.
- Reformulating ARAD 302 design studio to increase the size and complexity of the design problems in order for these to become a clear incremental challenge for the students coming from ARAD 301.
- Revising calendar and content for ARAD 401 Design Studio (Landscape) to include an architectural object in order to provide an adequate time window for the production of a mature and well thought out solution which will better prepare our students for future courses challenges.
- Revising ARAD 402 Design Studio to the B.6 Comprehensive Design criterion to provide for a second appearance in ARAD 420 Design Studio.
- Reformulating ARAD 410 and ARAD 420 Design Studios under one “Capstone Year” structure.
- Adopt a School Policy to require all Experimental Unit Coordinators to participate in Capstone project presentations to provide the interdisciplinary structure identified as essential in our academic structure, and to clearly connect subject verticality of the academic offer.
- Rotate faculty within the curriculum to reinforce architectural content and the vertical academic connection between courses and Units within the Program.

E. Nine proposed minors, as planned, may pose some challenges for students who wish to access them:

To effectively address this concern, since the last visit we’ve had an increment of 83% in the elective courses available in order to comply with the Minors’ requirements. Today our students have a total of 110 courses at the main campus that they can take as electives for completion of their

minors. This number is a significant increment compared with the 60 available for the 2013 Site Visit. This single initiative constitutes a natural and constant opportunity for our students to fully participate of campus life. The subjects and content of these courses are well distributed and enable adequate compliance with the nine (9) Experimental Units required.

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IV. PART FOUR: SUPPLEMENTAL INFORMATION

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IV.1. DESCRIPTION OF POLICIES AND PROCEDURES FOR EVALUATING STUDENT WORK

See Section I.4 for documents that will be included as part of the team room during the Initial Accreditation visit.

IV.2. COURSE DESCRIPTIONS

ARAC 101 Fundamentals of Historic Preservation and Conservation, 3 credits

Course Description:

The course is conceived as the formal introduction to the fundamental concepts, principles, methods and strategies within preservation and conservation. An emphasis is placed on the particular language of historic preservation and the understanding of concepts such as: Restoration, Reconstruction and Rehabilitation.

Course Goals & Objectives:

- Students will obtain knowledge of history and theory of historic preservation and conservation in various contexts (develop a broad view and perspective).
- Students will obtain the knowledge to document an existing structure or place.

Student Performance Criterion addressed:

C.9. Community and Social Responsibility

Topical Outline:

Investigative skills (10%)
Documentation skills (25%)
Valorization skills (30%)
Holistic understanding of the field (35%)

Prerequisites: None

Textbooks/Learning Resources:

Jokilehto, Jukka. *A History of Architectural Conservation* (Routledge. 2002)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: *See Faculty Matrix provided within APR Part I.2.1*

ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems, 3 credits

Course Description:

This course is provided as a practical guide to the methods for maintaining, restoring and rehabilitating historic buildings, as well as their constructive and administrative methodology. Environmental hazards, as pertaining to the deterioration and potential destruction of historic buildings, are also discussed.

Course Goals & Objectives:

- Students will be presented with the strategies and methodology of preservation.
- Students will develop skills in the documentation process of historic buildings.
- Students will understand materiality, construction systems and assemblies, as well as the administrative framework, management, permitting and regulatory structures that influence the practice of preservation.

Student Performance Criterion addressed:

Topical Outline:

Investigative skills (10%)

Documentation skills (25%)

Valorization skills (30%)

Holistic understanding of the field (35%)

Prerequisites: ARAC 101

Textbooks/Learning Resources:

Weaver, Martin E. *Conserving Buildings: Guide to Techniques and Materials* (Wiley. 1997)

Williamson, Ray A., and Paul R. Nickens. *Science and Technology in Historic Preservation* (Springer. 2000)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAC 301 Conservation Planning Strategies and Policies, 3 credits

Course Description:

The purpose of this course is to expand on the topic of planning policies and regulations that define the theoretical practice and implementation of conservation.

Course Goals & Objectives:

- Students will be provided with an opportunity to look in depth at governmental historic preservation programs at the federal, state, and local (city and county) levels as a comparative means of policy establishment.
- Students will understand the origin and implementation of design regulations, standards, and guidelines

Student Performance Criterion addressed:

C.7. Legal Responsibilities

Topical Outline:

Analysis of the relationship and presence of a building in its urban context (50%)
Policies on preservation platform to understand how to reuse or recycle architecture and/or its elements (50%)

Prerequisites: ARAC 201

Textbooks/Learning Resources:

Rodwell, Dennis. *Conservation and Sustainability in Historic Cities* (Wiley-Blackwell. 2007)

Swanke Hayden Connell Architects. *Historic Preservation: Project Planning and Estimating* (RSMMeans. 2001)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAD 101 Architectural Design Fundamentals I, 5 credits

Course Description:

This Design Studio serves as the base for the School of Architecture's Design Fundamentals Studio Series. Its main objective is to formally introduce Architecture students to the fundamental elements and principles inherent in architectural design and the conceptual and practical base by which all subsequent studio work will develop.

Course Goals & Objectives:

- Students will understand the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design and architectural composition.
- Students will explore all forms of visual communication from freehand drawing through modeling software.
- Students will learn presentation Skills to be used throughout their academic careers.

Student Performance Criteria addressed:

A.8. Ordering Systems Skills

Topical Outline:

Exploration (30%)

Experimentation (35%)

Application (35%)

Prerequisites: None

Textbook/Learning Resources:

Ching, Francis D.K. *Form, Space and Order* (John Wiley & Sons. 2007)

Friedman, Jonathan B. *Creation in Space: Fundamentals of Architecture* (Kendall Hunt Publishing. 1999)

Leach, Neil, David Turnbull, and Chris Williams. *Digital Tectonics* (Academy Press. 2004)

Pérez-Gómez, Alberto, and Louise Pelletier. *Architectural Representation and the Perspective Hinge* (The MIT Press. 2000)

Spiller, Neil. *Digital Architecture Now: A Global Survey of Emerging Talent* (Thames & Hudson. 2009)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 101 Diagramming and Representation Techniques (Lab), 1 credit

Course Description:

This Laboratory is the digital base for the Fundamental Design Studio I. The objective is to introduce students to digital representation techniques at a level consonant to the themes and concepts being developed within the main Studio. Technology is integrated with the process of design and exploration of ideas.

Course Goals & Objectives:

- Students will understand the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design and architectural composition.
- Students will explore all forms of visual communication from freehand drawing through modeling software.
- Students will learn presentation Skills to be used throughout their academic careers.

Student Performance Criteria addressed:

A.8. Ordering Systems Skills

Topical Outline:

Drawing and other representational techniques (60%)

Presentation Methods (40%)

Prerequisites: None

Textbook/Learning Resources:

Ching, Francis D.K. *Form, Space and Order* (John Wiley & Sons. 2007)

Friedman, Jonathan B. *Creation in Space: Fundamentals of Architecture* (Kendall Hunt Publishing. 1999)

Leach, Neil, David Turnbull, and Chris Williams. *Digital Tectonics* (Academy Press. 2004)

Pérez-Gómez, Alberto, and Louise Pelletier. *Architectural Representation and the Perspective Hinge* (The MIT Press. 2000)

Spiller, Neil. *Digital Architecture Now: A Global Survey of Emerging Talent* (Thames & Hudson. 2009)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAD 102 Architectural Design Fundamentals II, 5 credits

Course Description:

The Architectural Design Fundamentals II aims to further enhance the concepts and fundamentals studied in the previous studio with the introduction of complex geometries, curves, surfacing, meshing, and more advanced spatial programming both through traditional and digital techniques. These concepts shall be further enhanced with the introduction and implementation of the concepts of ambient, typology, capacity, time and an introduction to constructive systems.

Course Goals & Objectives:

- Students will understand the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design and architectural composition.
- Students will explore all forms of visual communication from freehand drawing through modeling software.
- Students will learn presentation Skills to be used throughout their academic careers.

Student Performance Criteria addressed:

A.8. Ordering Systems Skills

Topical Outline:

Exploration (20%)

Experimentation (30%)

Application (50%)

Prerequisites: ARAD 101, ARAR 101

Textbook/Learning Resources:

Ching, Francis D.K. *Form, Space and Order* (John Wiley & Sons. 2007)

Friedman, Jonathan B. *Creation in Space: Fundamentals of Architecture* (Kendall Hunt Publishing. 1999)

Leach, Neil, David Turnbull, and Chris Williams. *Digital Tectonics* (Academy Press. 2004)

Pérez-Gómez, Alberto, and Louise Pelletier. *Architectural Representation and the Perspective Hinge* (The MIT Press. 2000)

Spiller, Neil. *Digital Architecture Now: A Global Survey of Emerging Talent* (Thames & Hudson. 2009)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 102 Nonlinear Diagramming and Complex Geometry (Lab), 1 credit

Course Description:

This Laboratory aims to parallel and compliment the more complex concepts offered within the second Fundamental Design Studio, further enhancing the representational capabilities of the students with more complex tools and techniques.

Course Goals & Objectives:

- Students will understand the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design and architectural composition.
- Students will explore all forms of visual communication from freehand drawing through building information modeling software.
- Students will learn presentation Skills to be used throughout their academic careers.

Student Performance Criteria addressed:

A.8. Ordering Systems Skills

Topical Outline:

Drawing and other representational techniques (60%)

Presentation Skills (40%)

Prerequisites: ARAD 101, ARAR 101

Textbook/Learning Resources:

Ching, Francis D.K. *Form, Space and Order* (John Wiley & Sons. 2007)

Friedman, Jonathan B. *Creation in Space: Fundamentals of Architecture* (Kendall Hunt Publishing. 1999)

Leach, Neil, David Turnbull, and Chris Williams. *Digital Tectonics* (Academy Press. 2004)

Pérez-Gómez, Alberto, and Louise Pelletier. *Architectural Representation and the Perspective Hinge* (The MIT Press. 2000)

Spiller, Neil. *Digital Architecture Now: A Global Survey of Emerging Talent* (Thames & Hudson. 2009)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAD 201 Analytical Design Studio I: History and Theory, 5 credits

Course Description:

The first of the Analytical Design Studio series, ARAD 201 presents the link between the fundamentals of architecture and the historical basis of design.

Course Goals & Objectives:

- Students will define history and theory, and how they are written in order to study their cultural, ideological and academic concerns.
- Students will introduce, describe and explain the analytical tools as the ideological elements that constitute the main components of any cultural and intellectual manifestation.
- Students will produce a critical analysis of architectural manifestations and architects by identifying, analyzing and interpreting the main conceptual elements in order to reveal their inner workings, theoretical framework and formal manifestations.

Student Performance Criteria addressed:

A.6. Fundamental Design Skills, A.7. Use of Precedents, A.11. Applied Research

Topical Outline:

Acknowledgement of history as a non-scientific area of the human universe (15%)

Interpretation, subjectivity and the importance of the inter-connection of facts and events (15%)

Influence on historical and cultural patterns (35%)

Historic theory on the development of new modes of design (35%)

Prerequisites: ARAD 102, ARAR 102, ARHT 101

Textbook/Learning Resources:

Roth, Leland. *Understanding Architecture: Its Elements, History, and Meaning* (Westview Press. 2013)

Offered (semester and year): Fall (regular), spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARAR 201 Historical Documentation and Representation Techniques (Lab),
1 credit**

Course Description:

This Laboratory aims to provide students with the digital tools and methodology for documenting, manipulating and abstracting form, function, character, materiality, construct and style within historically and architecturally significant precedents complimentary to the main studio offering.

Course Goals & Objectives:

- Students will develop the ability to map theoretical strategies through digital means: patterns, repetition, symmetries and ornaments.
- Students will develop the ability to structure through technological tools systems of organization.

Student Performance Criteria addressed:

A.6. Fundamental Design Skills, A.7. Use of Precedents, A.11. Applied Research

Topical Outline:

Acknowledgement of history as a non-scientific area of the human universe (15%)

Interpretation, subjectivity and the importance of the inter-connection of facts and events (15%)

Influence on historical and cultural patterns (35%)

Historic theory on the development of new modes of design (35%)

Prerequisites: ARAD 102, ARAR 102, ARHT 101

Textbook/Learning Resources:

Roth, Leland. *Understanding Architecture: Its Elements, History, and Meaning*
(Westview Press. 2013)

Offered (semester and year): Fall (regular), spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARAD 202 Analytical Design Studio II: Adaptive Conservation and Preservation,
5 credits**

Course Description:

This Design Studio provides an introduction to the methodology of preservation of historically significant buildings and urban environments, as well as the more interventional adaptive conservation, rehabilitation, and reuse.

Course Goals & Objectives:

- Students will think broadly and consider planning, zoning, and other techniques as a way to supplement traditional conservation and/or preservation methods, with particular attention to the concepts of identity of place and public policy as both a limitation and opportunities.
- The students will confront design problems that juxtapose traditional building methods and new construction, both in single structures as well as within historic zones.

Student Performance Criterion addressed:

A.6. Fundamental Design Skills, B.3. Sustainability, C.1. Collaboration, C.3. Client Role in Architecture, C.6. Leadership

Topical Outline:

Investigative skills (15%)

Documentation skills (15%)

Valorization skills (20%)

Holistic understanding of the field (25%)

Response to the real life conditions that are part of the restoration of a building (25%)

Prerequisites: ARAD 201, ARAR 201, ARAC 101

Textbooks/Learning Resources:

Ames, David, and Richard Wagner. *Design & Historic Preservation: The Challenge of Compatibility* (University of Delaware Press. 2009)

Ching, Francis D. K. *Building Construction Illustrated* (Wiley, 2014)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 202 Dynamic Imaging and Documentation (Lab), 1 credit

Course Description:

This Laboratory expands on the notion of modeling with advanced representation techniques, use of materials, construction systems and detailing. The Laboratory promotes the utilization of high-end software to virtually assess existing conditions and interventions.

Course Goals & Objectives:

- Students will explore techniques will allow and compliment the design studio with the ability to test possible adaptations of traditional elements into modern prototypes and assemblies.
- Students will learn how to document and existing building through the elaboration of as built drawings

Student Performance Criterion addressed:

A.6. Fundamental Design Skills, B.3. Sustainability, C.1. Collaboration, C.3. Client Role in Architecture, C.6. Leadership

Topical Outline:

Drawing and other representational techniques (60%)
Presentation skills (40%)

Prerequisites: ARAD 201, ARAR 201, ARAC 101

Textbooks/Learning Resources:

Ames, David, and Richard Wagner. *Design & Historic Preservation: The Challenge of Compatibility* (University of Delaware Press. 2009)
Ching, Francis D. K. *Building Construction Illustrated* (Wiley, 2014)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAD 301 Experimental Design I: Sustainability and Technologies, 5 credits

Course Description:

This Design Studio aims to provide a fundamental understanding of mechanical, electrical, lighting, and fire protection systems within the built environment. This shall also give way to the integration of sustainable techniques to further enhance building efficiency.

Course Goals & Objectives:

- Students will engage theories, principles and methods on building technology implementation.
- Students will implement innovative sustainability means for creative problem solving.
- Students will analyze the built environment with emphasis on the creation and interrelationship of architectural form, function, structure, technology and site.

Student Performance Criteria addressed:

A.4. Technical Documentation, A.11. Applied Research, B.2. Accessibility, B.3. Sustainability, B.5. Life Safety, B.8. Environmental Systems, B.10. Building Envelope Systems, B.11. Building Service Systems

Topical Outline:

Providing spatial quality/effects through technological implementation (15%)
Studies on tectonics: materials, techniques and hinges (15%)
Range: diversity of building envelopes, services and systems (15%)
Performance criteria on design (15%)
Integrated and cohesive solutions (25%)
Recognition of comfort as a conceptualization tool (15%)

Prerequisites: ARAD 202, ARAR 202, ARST 101

Textbook/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)
American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)
Ching, Francis D. K. *Building Construction Illustrated* (Wiley, 2014)
International Code Council. *2012 International Building Code* (ICC. 2011)

Offered (semester and year):

Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 301 Parametric Modeling (Lab), 1 credit

Course Description:

This Laboratory aims to introduce students to the use of the parametric capabilities of various 3D modeling software to develop models that can be updated in real time. These models are to be tested using finite element analysis software, and then readjusted using data gathered from the analysis.

Course Goals & Objectives:

- Students will develop the ability of understanding the role of data gathering, research, and analysis in design through digital means.
- Students will develop techniques of two and three dimensional representation with a strong sense of craft.
- Students will develop an exploration capacity to make technologically sound architectural expressions within natural and artificial settings.

Student Performance Criterion addressed:

A.4. Technical Documentation, A.11. Applied Research, B.2. Accessibility, B.3. Sustainability, B.5. Life Safety, B.8. Environmental Systems, B.10. Building Envelope Systems, B.11. Building Service Systems

Topical Outline:

Representation skills on spatial quality/effects through technological implementation (15%)

Representation skills on tectonics: materials, techniques and hinges (15%)

Representation skills on building envelopes, services and systems (15%)

Representation skills of performance criteria on design (15%)

Representation skills of integrated and cohesive solutions (25%)

Representation skills on individual recognition of comfort as a conceptualization tool (15%)

Prerequisites: ARAD 202, ARAR 202, ARST 101

Textbook/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

Ching, Francis D. K. *Building Codes Illustrated: A Guide to Understanding the 2012 International Building Code* (Wiley. 2012)

Ching, Francis D. K. *Building Construction Illustrated* (Wiley, 2014)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARAD 302 Experimental Design Studio II: Structural Framework and Assemblages,
5 credits**

Course Description:

The Design Studio aims to introduce students to the theoretical and practical application of structural concepts and assemblies as an integral part of the architectural project.

Course Goals & Objectives:

- Students will learn the basic concepts in complex curve structural analysis.
- Students will acquire the required knowledge of load distribution and deflections in the architectural project.
- Students will understand the behavior of structures when dynamic and static actions come into contact with them.
- Students will acquire the required knowledge of the structural performance of different geometries and structural typologies.

Student Performance Criteria addressed:

A.2. Design Thinking Skills, A.4. Technical Documentation, A.5. Investigative Skills, A.10. Cultural Diversity, B.2. Accessibility, B.5. Life Safety, B.10. Building Envelope Systems, B.12. Building Materials and Assemblies

Topical Outline:

Structural analysis (30%)

Comprehension of the structural analysis (20%)

Conceptual and schematic design of the proposals (50%)

Prerequisites: ARAD 301, ARAR 301, ARSF 101

Textbooks/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

Gordon, J. E. *Structures: Or Why Things Don't Fall Down* (Da Capo Press. 2003)

International Code Council. *2012 International Building Code* (ICC. 2011)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 302 Parametric Detailing (Lab), 1 credit

Course Description:

This Laboratory aims to further develop skills in the use of the parametric capabilities of different 3D finite element modeling software to analyze structural models.

Course Goals & Objectives:

- Students will acquire the required knowledge of Computer-Aided-Design technologies for structural analysis.
- Students will develop the critical capacity of students to acquire, use, and interpret the different software in the structural analysis.
- Students will develop the capacity to interpret the results obtained from the structural analysis.

Student Performance Criteria addressed:

A.2. Design Thinking Skills, A.4. Technical Documentation, A.5. Investigative Skills, A.10. Cultural Diversity, B.2. Accessibility, B.5. Life Safety, B.10. Building Envelope Systems, B.12. Building Materials and Assemblies

Topical Outline:

Structural analysis (30%)

Discretization of the structural form (20%)

Interpretation of the results obtained from the structural analysis (20%)

Adjustments to the structure base on the analysis obtained (30%)

Prerequisites: ARAD 301, ARAR 301, ARSF 101

Textbooks/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

Ching, Francis D. K. *Building Codes Illustrated: A Guide to Understanding the 2012 International Building Code* (Wiley. 2012)

McGuire, William, Richard H. Gallagher, and Ronald D. Ziemian. *Matrix Structural Analysis* (Wiley. 2013)

Meek, J. L. *Computer Methods in Structural Analysis* (CRC Press. 1990)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARAD 401 Contextual Design Studio I: Landscape, Ecology and Environment,
5 credits**

Course Description:

This Design Studio deals with the understanding of the practical, theoretical and cultural aspects inherent in a design process that integrates the meshing of natural resources into the architectural project on various scales of the landscape.

Course Goals & Objectives:

- Students will be introduced to basic approaches and techniques for the analysis and assessment of the natural, cultural, social and experiential facets of sites and their surroundings.
- Students will explore issues of territorial planning, developing an understanding of logical interrelationships among different land uses.
- Students will gain further understanding of place and the landscape experience as an interaction of those features and processes at the human scale.
- Students will develop skills in meshing the attributes of a site with the expectations of a program and the feature of actual buildings.
- Students will refine site design skills, from functional/technical aspects to experiential facts.
- Students will refine skills in place making, drawing upon local context, site, and program to create a responsive and memorial design.

Student Performance Criteria addressed: A.3. Visual Communication Skills, B.1. Pre-Design, B.3. Sustainability, B.4 Site Design, C.1. Collaboration, C.6. Leadership

Topical Outline:

Site explorations on small scale landscapes (15%)

Site explorations on large scale landscapes (30%)

Master planning (15%)

Design of contemporary architectural and landscape scenarios (40%)

Prerequisites: ARAD 302, ARAR 302, ARLE 101

Textbooks/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

Booth, Norman K. *Basic Elements of Landscape Architectural Design* (Waveland Press. 1989)

Harris, Charles, and Nicholas Dines. *Time-Saver Standards for Landscape Architecture* (McGraw-Hill Professional. 1997)

LaGro, James A. *Site Analysis: A Contextual Approach to Sustainable Land Planning and Site Design* (Wiley. 2007)

Russ, Thomas. *Site Planning and Design Handbook* (McGraw-Hill Professional. 2009)

Strom, Steven, Kurt Nathan, and Jake Woland. *Site Engineering for Landscape Architects* (Wiley. 2013)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 401 Scripting and Procedural Morphology (Lab), 1 credit

Course Description:

This Laboratory explores the advent of scripting and three-dimensional modeling of organic contexts in the representation of tangible design solutions. The computer-aided technologies allow the examination of contextual relationships and overall design cohesiveness through the use of fabrication technology.

Course Goals & Objectives:

- Students will develop the ability to map landscape design paradigms through digital means: contours, natural flow, erosion, environmental fluxes and meshing strategies.
- Students will develop the ability to structure ecosystems in architecture through technological tools.
- Students will develop the ability to digitally analyze site conditions and complex topographies.
- Students will develop sensibility of exploration to make artful expressions and meaning within environmental issues.

Student Performance Criterion addressed: A.3. Visual Communication Skills, B.1. Pre-Design, B.3. Sustainability, B.4 Site Design, C.1. Collaboration, C.6. Leadership

Topical Outline:

Representation of site explorations on small scale landscapes (15%)

Representation of site explorations on large scale landscapes (30%)

Master planning representation skills (15%)

Representation of contemporary architectural and landscape scenarios (40%)

Prerequisites: ARAD 302, ARAR 302, ARLE 101

Textbook/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

LaGro, James A. *Site Analysis: A Contextual Approach to Sustainable Land Planning and Site Design* (Wiley. 2007)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAD 402 Contextual Design Studio II: Urban Scapes and Communities, 5 Credits

Course Description:

This Design Studio introduces students to political aspects of urban design, the key concepts for the analysis and development of urban realms, and the architectural design within the urban context. The studio focuses on the application of strategies that impact the urban realm within the notion of contextual equilibrium, pedestrian settings, cultural rituals, perception, density and organizational elements.

Course Goals & Objectives:

- Students will understand the relationships between the different tools for planning analysis.
- Students will obtain, develop and share knowledge of practical tools used for planning and management at a variety of scales and in various contexts.
- Students will understand the relationships between urban and architectural design within the prevailing economic, social and cultural factors.
- Students will learn to develop an architectural project within its proposed urban context, understanding the ramifications of each design decision in the city fabric.

Student Performance Criteria addressed: A.7. Use of Precedents, B.6. Comprehensive

Topical Outline:

Precedent analysis (10%)

Site analysis (15%)

Master planning (15%)

Design of architectural project (60%)

Prerequisites: ARAD 401, ARAR 401, ARUS 101

Textbooks/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

Eade, John, and Christopher Mele. *Understanding the City: Contemporary and Future Perspectives* (Wiley-Blackwell. 2011)

International Code Council. *2012 International Building Code* (ICC. 2011)

Moughtin, J. C. *Urban Design: Street and Square* (Architectural Press. 1999)

Rossi, Aldo. *The Architecture of the City* (The MIT Press. 1984)

Schwalbach, Gerrit. *Basics Urban Analysis* (Birkhäuser Architecture. 2009)

Sepúlveda, Aníbal. *Puerto Rico urbano: atlas histórico de la ciudad puertorriqueña* (Plaza Mayor. 2004)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.

ARAR 402 Territorial, Urban and Infrastructural Data Analysis (Lab), 1 Credit

Course Description:

This Laboratory aims to introduce students to the utilization and analysis of data through the use of Geographical Information Systems (GIS) software. Custom interfaces are to be developed to adjust zoning models based on economics, density, transportation, demographics and other qualitative aspects of urban conditions to compliment the designs being developed within the main studio.

Course Goals & Objectives:

- Students will understand the relationships between the different tools for planning analysis through digital means.
- Students will obtain, develop and share knowledge of technological tools used for planning and management at a variety of scales and in various contexts.
- Students will learn to represent an architectural project within its proposed urban context.
- Students will further develop visual communication skills to present ideas at different stages of the design process.

Student Performance Criteria addressed: A.7. Use of Precedents, B.6. Comprehensive Design

Topical Outline:

Data analysis through GIS (40%)

Representational skills for the development of the architectural project (60%)

Prerequisites: ARAD 401, ARAR 401, ARUS 101

Textbooks/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

Ching, Francis D. K. *Building Codes Illustrated: A Guide to Understanding the 2012 International Building Code* (Wiley. 2012)

King, Anthony D. *Re-Presenting the City: Ethnicity, Capital and Culture in the Twenty-First Century Metropolis* (NYU Press. 1996)

Lebesque, Sabine, and Vibeke Gieskes. *Joan Busquets: The City in Layers* (Architectura & Natura Press. 2011)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAD 410 Developmental Design Studio I: Legal and Administrative Awareness, 5 credits

Course Description:

This Research and Design Studio aims to establish an inquiry based framework for a theoretical and investigative development of a hypothesis in order to identify, analyze, and synthesize processes, legal structures and contexts to inform a prospective architectural design statement for ARAD 420.

Course Goals & Objectives:

- Students will implement innovative means for creative problem solving.
- Students will develop a critical architecture position, style and methodology as part of their theoretical approach, and to apply it in a design project.
- Students will develop skills to communicate effectively the ethical, legal and social responsibilities and roles of architecture.
- Students will analyze the built and unbuilt environment with emphasis on the creation and interrelation of architectural form, function, program, structure, technology and site.

Student Performance Criteria addressed: A.2. Design Thinking Skills, A.5. Investigative Skills, B.1. Pre-Design, C.3. Client Role

Topical Outline:

Foundation and principles (25%)
Core analysis and interpretation (25%)
Site analysis and programming (25%)
Conceptual design (25%)

Prerequisites: ARAD 402, ARAR 402, ARLA 101

Textbook/Learning Resources:

Balmer, Jeffrey, and Michael T. Swisher. *Diagramming the Big Idea: Methods for Architectural Composition* (Routledge. 2012)
Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. *The Craft of Research* (University of Chicago Press. 2008)
Creswell, John W. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (SAGE Publications, Inc. 2013)
Groat, Linda N. *Architectural Research Methods* (Wiley. 2013)
Ramsfield, Jill J. *The Law as Architecture: Building Legal Documents* (West Academic Publishing. 2000)
Seonwook, Kim. *Architectural and Program Diagrams* (DOM Publishers. 2012)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 410 Independent Research, 1 credit

Course Description:

This Laboratory provides the technological framework through which students engage their specific and individual research needs, within which their Studio research projects shall evolve and flourish. The Laboratory also centers on the reinterpretation of the concept of regulation to inform the making of architecture.

Course Goals & Objectives:

- Students will engage in the use of research tools, graphic schematization and data mapping.
- Students will develop the ability to structure systems of organization through technological tools.
- Students will engage in the making of graphic design presentations and production of deliverables to prove their hypothesis.

Student Performance Criteria addressed:

A.2. Design Thinking Skills, A.5. Investigative Skills, B.1. Pre-Design, C.3. Client Role in Architecture

Topical Outline:

Information graphics skills (25%)

Layout design skills (25%)

Site analysis and programming representational skills (25%)

Conceptual design representational skills (25%)

Prerequisites: ARAD 402, ARAR 402, ARLA 101

Textbook/Learning Resources:

Balmer, Jeffrey, and Michael T. Swisher. *Diagramming the Big Idea: Methods for Architectural Composition* (Routledge. 2012)

Lupton, Ellen. *Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students* (Princeton Architectural Press. 2010)

Seonwook, Kim. *Architectural and Program Diagrams* (DOM Publishers. 2012)

Tondreau, Beth. *Layout Essentials: 100 Design Principles for Using Grids* (Rockport Publishers. 2011)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARAD 420 Developmental Design Studio II: Development Assessment,
Entrepreneurship and Feasibility, 5 credits**

Course Description:

This Design Studio aims to provide the platform in which students can prove their hypothesis, previously developed in ARAD 410, into a comprehensive architectural design solution. Through interpretation and analysis, students are expected to culminate their final Design Studio with a feasible development project from master planning and site design, to building design.

Course Goals & Objectives:

- Students will engage in fundamental methodology for land use development and architectural design.
- Students will implement innovative means for creative problem solving.
- Students will utilize two and three dimensional visual organizations to communicate concepts and the argumentation of architectural design innovation.
- Students will plan, develop and present a project from a feasible standpoint.

Student Performance Criteria addressed:

A.3 Visual Communication Skills, B.6. Comprehensive Design

Topical Outline:

Feasibility analysis (10%)

Pre-design revision (15%)

Design of architectural project (75%)

Prerequisites: ARAD 410, ARAR 410, ARDA 101

Textbook/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

International Code Council. *2012 International Building Code* (ICC. 2011)

Sokol, David B. *Property Development and Progressive Architecture: The New Alliance* (Academy Press. 2004)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARAR 420 Independent Research II, 1 credit

Course Description:

This Laboratory provides the technological framework through which students engage their specific and individual design and representation needs, within which their Studio projects shall evolve and flourish. The Laboratory also centers on the dynamic character of the digital tools as used by design professionals for advanced project deliveries and presentations.

Course Goals & Objectives:

- Students will utilize two and three dimensional visual organizations to communicate concepts and the argumentation of architectural design innovation.
- Students will understand trends and changes, in diverse technologies and software, for integration into their final Studio presentation.
- Students will learn to represent their feasibility analysis.

Student Performance Criteria addressed:

A.3 Visual Communication Skills, B.6. Comprehensive Design

Topical Outline:

Representation skills for a feasibility analysis (10%)

Revision of the pre-design representation (15%)

Representational skills for the development of the architectural project (75%)

Prerequisites: ARAD 410, ARAR 410, ARDA 101

Textbook/Learning Resources:

Allen, Edward, and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (Wiley. 2011)

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)

Ching, Francis D. K. *Building Codes Illustrated: A Guide to Understanding the 2012 International Building Code* (Wiley. 2012)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARDA 101 Entrepreneurship on Developmental Politics, 3 credits

Course Description:

This course aims to provide students with the knowledge, skills, vision, and strategies to become entrepreneurs and leaders within the development industry.

Course Goals & Objectives:

- Students will acknowledge the necessity of acquiring business understanding in order to become entrepreneurs in the competitive professional field of architecture.
- Students will understand their social and environmental responsibility on every step of their professional careers in the development industry.

Student Performance Criteria addressed:

B.7. Financial Considerations, C.4. Project Management, C.5. Practice Management

Topical Outline:

Business planning (25%)

Developmental processes for architectural projects (20%)

Project management: time and costs (35%)

Practical methodologies (20%)

Prerequisites: ARLA 101

Textbook/Learning Resources:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico. *Manual de práctica profesional* (CAAPPR. 2003)

Lluch, José. *Gerencia e ingeniería de construcción* (Editorial UPR. 2005)

Pressman, Andrew, and Thomas Fisher. *Professional Practice 101: Business Strategies and Case Studies in Architecture* (Wiley. 2006)

Romaguera, José M. *Chispa empresarial: reconociendo y haciendo realidad la oportunidades empresariales* (International Entrepreneurship Institute. 2006)

Winkler, Greg, and Gary Chiumento. *Construction Administration for Architects* (McGraw-Hill Professional. 2009)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARDA 201 Economic Feasibility and Finances in Real State, 3 credits

Course Description:

This course aims to introduce students to the fundamental concepts and practice of cost effective real estate planning and development.

Course Goals & Objectives:

- Students will learn to balance their innovations with the ability to identify realizable business opportunities from objective contemplations.
- Students will learn how to identify and forecast socioeconomic aspects of the region they intend to develop to assure investment and expansion opportunities.
- Students will obtain the quantitative and qualitative comprehension of their ideas in order to understand the profitable aspects of their ventures.

Student Performance Criteria addressed:

B.7. Financial Considerations, C.4. Project Management

Topical Outline:

Real estate development processes (25%)

Finances (20%)

Project management: cost estimates (20%)

Forecasting models and methods (35%)

Prerequisites: ARDA 101

Textbook/Learning Resources:

Miles, Mike E, and Gayle L. Berens. *Real Estate Development: Principles and Processes* (Urban Land Institute. 2007)

Pressman, Andrew, and Thomas Fisher. *Professional Practice 101: Business Strategies and Case Studies in Architecture* (Wiley. 2006)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARDA 301 Marketing and Branding through Commercial Communication Skills,
3 credits**

Course Description:

This course aims to introduce students to the significance of marketing process, branding, and identity as critical tools prior, during and after the development process in an architectural practice setting.

Course Goals & Objectives:

- Students will acquire communication skills to present initiatives and proposals.
- Students will acquire visionary skills to create achievable concepts with a holistic entrepreneurship mentality.
- Students will understand the costs associated with practice.

Student Performance Criteria addressed:

A.1. Communication Skills, C.5. Practice Management

Topical Outline:

Marketing and branding: concepts and challenges (30%)

Financial statements (20%)

Property, asset and portfolio management (20%)

Operational costs, dues and fees (30%)

Prerequisites: ARDA 201

Textbook/Learning Resources:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico. *Manual de práctica profesional* (CAAPPR. 2003)

Pressman, Andrew, and Thomas Fisher. *Professional Practice 101: Business Strategies and Case Studies in Architecture* (Wiley. 2006)

Spoelstra, Jon, and Mark Cuban. *Marketing Outrageously Redux: How to Increase Your Revenue by Staggering Amounts* (Bard Press. 2011)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARHT 101 Architectural History I: Ancient to Renaissance, 3 credits

Course Description:

This course provides the historical basis for architectural history, theory and design providing a panoramic and chronological perspective of architectural design and culture.

Course Goals & Objectives:

- Students will obtain, develop, and share knowledge of history and theory of world architecture at a variety of scales and in various contexts (develop a broad view and perspective).
- Students will understand the relationships between history/theory, and social/cultural factors.

Student Performance Criteria addressed:

A.9. Historical Traditions and Global Culture

Topical Outline:

Developing knowledge of history and theory of world architecture (50%)

Establishing the relationships between history and society (50%)

Prerequisites: None

Textbook/Learning Resources:

Ching, Francis D. K., Mark M. Jarzombek, and Vikramaditya Prakash. *A Global History of Architecture* (Wiley. 2010)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See *Faculty Matrix* provided within APR Part I.2.1

**ARHT 201 Architectural History II: Baroque to Contemporary Western Civilization,
3 credits**

Course Description:

This course provides a holistic view of architectural design and culture through analysis and critique from Baroque to contemporary western architecture and culture.

Course Goals & Objectives:

- Students will broaden their analytical skills of historical contexts.
- Students will learn to do research and to integrate precedents in the critical thinking process.
- Students will refine their understanding of data gathering.

Student Performance Criteria addressed:

A.1. Communication Skills

Topical Outline:

Acquisition of analytical skills (60%)

Research integrating precedents (20%)

Data gathering process (20%)

Prerequisites: ARHT 101

Textbook/Learning Resources:

Ching, Francis D. K., Mark M. Jarzombek, and Vikramaditya Prakash. *A Global History of Architecture* (Wiley. 2010)

Frampton, Kenneth. *Modern Architecture: A Critical History* (Thames & Hudson. 2007)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARHT 301 Architectural History III: Latin America and Puerto Rico, 3 credits

Course Description:

This course introduces the student to the cultural, social, economic, philosophical, technological and political forces driving architectural and urban design of Latin America and the Caribbean.

Course Goals & Objectives:

- Students will learn to position the examined architectural solution into the evolutionary historical and theoretical timeline.
- Students will learn to identify regional trends in architecture.

Student Performance Criteria addressed:

A.10. Cultural Diversity

Topical Outline:

Positioning architectural examples into historical timelines (60%)

Identifying regional trends (40%)

Prerequisites: ARHT 201

Textbook/Learning Resources:

Ayala, César J., and Rafael Bernabé. *Puerto Rico in the American Century: A History since 1898* (The University of

North Carolina Press. 2009)

Fraser, Valerie. *Building the New World: Modern Architecture in Latin America* (Verso. 2001)

Gosner, Pamela W. *Caribbean Baroque: Historic Architecture of the Spanish Antilles* (Passeggiata Pr. 1996)

Lejeune, Jean-Francois. *Cruelty and Utopia: Cities and Landscapes of Latin America* (Princeton Architectural Press. 2005)

Rigau, Jorge. *Puerto Rico 1900: Turn-of-the-Century Architecture in the Hispanic Caribbean, 1890-1930* (Rizzoli, 1992)

Stout, Nancy, and Jorge Rigau. *Habana: La Habana* (Rizzoli, 1994)

Vivoni-Farage, Enrique, and Silvia Álvarez Curbelo. *Hispanofilia: arquitectura y vida en Puerto Rico, 1900-1950*

(University of Puerto Rico Press, 1998)

Vivoni-Farage, Enrique, and Silvia Álvarez-Curbelo. *Ilusión de Francia: Arquitectura y Afrancesamiento en Puerto Rico* (AACUPR. 1999)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARLA 101 Introduction to Law, Contracts and Professional Liability, 3 credits

Course Description:

This course introduces students to the basic legal concepts, legal sources and professional liability issues arising from of the design and development processes.

Course goals and objectives:

- The students will engage in an intellectual dialogue between legal concepts and professional liability issues, and their interaction and effect on design intentions and codes implementation.
- Students will be oriented towards an understanding of the legal practice, its origins, history and relationship with everyday life.
- Students will acquire a broad perspective of the challenges the profession has to offer from a legal standpoint.

Student Performance Criteria addressed:

C.7. Legal Responsibilities, C.8. Ethics and Professional Judgment

Topical Outline:

Constitutional law and conflicts of law (10%)

Government Structure (5%)

Puerto Rico Civil Code (5%)

Legal sources, materials and introduction to legal research (10%)

Torts and professional liability (40%)

Ethics and professional affiliation (30%)

Pre-requisites: ARHT 101

Textbook/Learning Resources:

Atienza, Manuel. *Introducción al derecho* (Fontamara. 2011)

Ediciones Situm. *Código Civil de Puerto Rico* (Ediciones Situm/Biblio Services, Inc. 2012)

Muñiz-Argüelles, Luis, and Migdalia Fraticelli-Torres. *La investigación jurídica en el derecho puertorriqueño: fuentes puertorriqueñas, norteamericanas y españolas* (Editorial Temis. 2000)

Panero-Gutiérrez, Ricardo. *Derecho romano* (Editorial Tirant Lo Blanch. 2008)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARLA 201 Professional Practice and Contractual Procedures in Architecture,
3 credits**

Course Description:

This course introduces students to the basic concepts of law, practice and contracts, as well as the jurisdiction of administrative agencies in the development process. Lectures are oriented towards an understanding of legal ordinances and how to secure and structure simple transactions.

Course goals and objectives:

- Students will understand the basic concepts of law and the jurisdiction of administrative agencies in the development process.
- Students will understand contract laws.
- Students will be able to identify types of contracts and legal relationships.
- Students will understand transactional matters from a legal standpoint.

Student Performance Criteria addressed: C.5. Practice Management, C.7. Legal Responsibilities, C.8. Ethics and Professional Judgment

Topical Outline:

Property law (25%)

Restrictions over real estate (10%)

Obligations and contracts law (35%)

Administrative law (30%)

Pre-requisites: ARLA 101

Textbook/Learning Resources:

American Institute of Architects. *The Architecture Student's Handbook of Professional Practice* (Wiley. 2008)

Ediciones Situm. *Código Civil de Puerto Rico* (Ediciones Situm/Biblio Services, Inc. 2012)

Herrmann, Robert F. *Law for Architects: What You Need to Know* (W. W. Norton & Company. 2012)

Lluch, José. *Gerencia e ingeniería de construcción* (Editorial UPR. 2005)

Miles, Mike E., Gayle L. Berens, and Marc A. Weiss. *Real Estate Development: Principles and Process* (Urban Land Institute. 2007)

Vélez-Torres, José R. *Curso de derecho civil: derecho de obligaciones* (Universidad Interamericana de Puerto Rico. 1997)

Vélez-Torres, José R. *Curso de derecho civil: derecho de contratos* (Universidad Interamericana de Puerto Rico. 2004)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.

ARLE 101 Built Environment and Culture in the History of Landscape Architecture, 3 Credits

Course Description:

This course investigates the relationship between socio-cultural practices and the development and organization of contemporary built environments. Using theoretical orientations from landscape architecture, architecture, territorial planning, geography, sociology, and cultural anthropology, it also investigates how social structures are spatially embedded in contemporary built environments.

Course Goals and Objectives Skills:

- Students will obtain, develop and share knowledge of history and theory of landscape design, planning and management, at a variety of scales and in various contexts (develop a broad view and perspective).
- Students will be introduced in the theoretical environment for both private and public practice of landscape architecture.
- Students will understand the relationships between Landscape Architecture and prevailing economic, social and cultural factors.
- Students will be made aware of renowned professionals within the realms of site design and territorial planning, in a local and regional scale that exemplifies the evolution of the professional practice.
- Students will understand the relationships between Landscape Architecture and other related professional disciplines.

Student Performance Criteria addressed: A.9. Historical Traditions and Global Culture

Topical Outline:

Introduction of values and commodities (10%)

Design philosophy, sustainability, environment behavior, and systems theory (15%)

Procedural theory, programming, planning, and landscape suitability analysis (15%)

Biophysical environment (15%)

Human environment and culture (15%)

Design form and intent, natural form, and purpose (30%)

Prerequisites: ARHT 201

Textbooks/Learning Resources

Berrizbeitia, Anita, and Linda Pollack. *Inside Outside: Between Architecture and Landscape* (Rockport. 2003)

Burns, Carol, and Andrea Kahn. *Site Matters* (Routledge. 2005)

Mann, William A. *Landscape Architecture: An Illustrated History in Timelines, Site Plans and Biography* (Wiley, 1993)

Rogers, Elizabeth Barlow. *Landscape Design: A Cultural and Architectural History* (Harry N. Abrams. 2001)

Simo, Melanie. *100 Years of Landscape Architecture: Some Patterns of a Century* (ASLA Press. 1999)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARLE 201 Environment Construction Processes, Materials and Techniques,
3 credits**

Course Description:

This course provides the foundation for site design in Landscape Architecture. At the core of the course are four general bodies of knowledge: geometrics, landform manipulation, site systems, and computer applications for site analysis and design. The primary focus is on the major site features as related to site drainage, such as soil, topography, and surface geology.

Course Goals and Objectives Skills:

- Students will be guided into their efforts of acquiring and processing site data.
- Students will perform calculations for activities such as cut and fill, spot elevations, and slopes.
- Students will visualize and complete basic manipulation of landforms.
- Students will understand the interaction of physical site features on individual sites (e.g., soil and topography).
- Students will understand the development process of a project in the profession of Landscape Architecture.
- Students will be familiarized with the roles of the designer and the complementing professions on the development of a project.

Student Performance Criteria addressed: B.4. Site Design

Topical Outline:

Contours and form, interpolation and slope, and slope formula application (10%)

Soils in construction (10%)

Grading constraints, design and process (15%)

Grading case studies for landform and architecture (10%)

Storm water management, soil erosion and sediment control (15%)

Designing and sizing storm water management systems (15%)

Site layout and dimensioning for horizontal road alignment (15%)

Case studies for storm water management and road alignment (10%)

Prerequisites: ARLE 101

Textbooks/Learning Resources

Berrizbeitia, Anita, and Linda Pollack. *Inside Outside: Between Architecture and Landscape* (Rockport. 2003)

Burns, Carol, and Andrea Kahn. *Site Matters* (Routledge. 2005)

Sutherland, Lyall. *Designing the New Landscape* (Thames & Hudson. 1998)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.

ARLE 301 Ecological Principles in the Built Environment, 3 credits

Course Description:

The course focuses on basic ecological principles and concepts at two general scales: the small-site scale and the larger-regional scale of territorial landscape. Key concepts explored include: population, community, ecosystem, land-use patterns and policies, development and resource management, community design issues, and strategies for improving environmental integrity and quality of life.

Course Goals and Objectives Skills:

- Students will understand the ecological processes and human activities that shape contemporary landscapes.
- Students will explore the values and ethical responsibilities of architects and other professionals who share a significant role in shaping human interaction with the land.
- Students will understand and apply basic concepts from the science of ecology to the challenges of territorial design and management.
- Students will be able to identify plant communities in the field and to link them functionally and historically to the development of the landscape.
- Students will understand the relationships between Landscape Architecture and other related professional disciplines, organized communities and environmental agencies.

Student Performance Criteria addressed:

C.2. Human Behavior

Topical Outline:

Sustainable planning and green infrastructure systems (40%)

Metric on environmental performance (30%)

Regenerative and ecological design (30%)

Prerequisites: ARLE 201

Textbooks/Learning Resources

Berrizbeitia, Anita, and Linda Pollack. *Inside Outside: Between Architecture and Landscape* (Rockport. 2003)

Burns, Carol, and Andrea Kahn. *Site Matters* (Routledge. 2005)

Sutherland, Lyall. *Designing the New Landscape* (Thames & Hudson. 1998)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARSF 101 Architectural Structures I: Static and Strengths, 3 credits

Course Description:

This course consists in an introduction to the general concepts of applied forces, analysis, and design of structural systems, and how they impact the architectural object.

Course Goals & Objectives:

- Students will understand the analytical reasoning needed in order to innovate using the learned tools.
- Students will calculate and understand the forces and stresses acting on structures.
- Students will acquire knowledge of static actions that come into contact with structures.
- Students will acquire knowledge of the structural performance of different geometries.
- Students will develop analytic and critical skills through both mathematical and visual investigation of structures.

Student Performance Criteria addressed:

B.9. Structural Systems

Topical Outline:

Principles of structural analysis (30%)

Equivalent system of forces (30%)

Equilibrium of force systems (40%)

Prerequisites: PHYS 217

Textbooks/Learning Resources:

Beer, Ferdinand, E. Russell Johnston Jr., and David Mazurek. *Vector Mechanics for Engineers: Statics* (McGraw-Hill Science/Engineering/Math. 2012)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARSF 201 Architectural Structures II: Composite Construction on Wood and Steel, 3 credits

Course Description:

This course is an introduction to the basic theoretical concepts for the design and calculation of steel and wood structures, and the properties inherent to each material.

Course Goals & Objectives:

- Students will acquire knowledge of load distribution and deflections present in the architectural project.
- Students will acquire knowledge of mechanical, physical and chemical properties of steel and wood.
- Students will understand the pre-dimensioning of structural sections according to materials properties.
- Students will acquire knowledge of the structural performance of different geometries and materials.
- Students will acquire full awareness of the spatial possibilities of steel and wood.
- Students will be able to recognize structural pathologies.
- Students will be able to understand structural plans, recognize mistakes and propose solutions.
- Students will gain comprehension of economy in the building of a structure.

Student Performance Criteria addressed: B.9. Structural Systems

Topical Outline:

Steel structure typologies (10%)

Wood structure typologies (10%)

Study, design, and analysis of steel sections under loads (20%)

Study, design, and analysis of wood sections under loads (20%)

Joints and connections (15%)

Applicable codes (15%)

Pathologies, control and protection of structures (10%)

Prerequisites: ARSF 101

Textbooks/Learning Resources:

American Institute of Steel Construction. *Steel Construction Manual* (Ingram. 2011)

American Wood Council. *Manual for Engineered Wood Construction* (AWC. 2012)

American Wood Council. *National Design Specification for Wood Construction* (AWC. 2005)

International Code Council. *2012 International Building Code* (ICC. 2011)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARSF 301 Architectural Structures III: Monolithic Construction on Masonry and Concrete, 3 credits

Course Description

This course is an introduction to the basic theoretical concepts for the design and calculation of reinforced concrete and masonry structures, and the properties inherent to each material.

Course Goals & Objectives:

- Students will acquire knowledge of load distribution and deflections present in the architectural project.
- Students will acquire knowledge of mechanical, physical and chemical properties of concrete and masonry.
- Students will understand the pre-dimensioning of structural sections according to materials properties and structural performance of different geometries and materials.
- Students will be able to recognize structural pathologies.
- Students will be able to understand structural plans, recognize mistakes and propose solutions.
- Students will gain comprehension of economy in the building of a structure.

Student Performance Criteria addressed: B.9. Structural Systems

Topical Outline:

Masonry structure typologies (10%)
Concrete structure typologies (10%)
Study, design, and analysis of masonry sections under loads (20%)
Study, design, and analysis of concrete sections under loads (20%)
Joints and connections (15%)
Applicable codes (15%)
Pathologies, control and protection of structures (10%)

Prerequisites: ARSF 201

Textbooks/Learning Resources:

Abruña, Fernando. *Materiales y procedimientos de construcción* (Editorial AZ. 1999)
American Concrete Institute 318 Committee. *Building Code Requirements for Structural Concrete and Commentary* (ACI. 2011)
Jiménez-Montoya, Pedro, Álvaro García-Meseguer, Francisco Morán-Cabré, and Juan Carlos Arroyo-Portero. *Hormigón armado* (Gustavo Gili, 2010)
National Concrete Masonry Association. *Concrete Masonry Standards* (National Concrete Masonry Association. 2008)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARST 101 Tectonics on Material Applications and Methods, 3 credits

Course Description:

The notion of tectonics constitutes a direct challenge to current mainstream architectonic thinking of the subjectively unlimited artistic free form. However, as valid as that concept is, some architects claim for architecture about assemblage and construction rather than about abstract forms. This course inserts students in the middle of that debate.

Course Goals & Objectives:

- Students will be immersed in a framework of interdisciplinary collaboration within a research and investigation culture.
- Students will develop analytic and critical skills through both characteristics research and visual investigation of materials.
- Students will be engaged in promoting the debate of technological methods vs. abstract forms.
- Students will gain a wider spread of material applications into the design process.
- Students will acquire a background of renowned buildings, in and out of Puerto Rico, that exemplifies diverse tectonics.

Student Performance Criteria addressed:

B.12. Building Materials and Assemblies

Topical Outline:

Introduction (10%)
Concrete (20%)
Masonry (10%)
Metals (20%)
Wood and Plastics (10%)
Thermal and Moisture Protection (10%)
Doors and Windows (10%)
Finishes (10%)

Prerequisites: ARAD 101, ARAR 101

Textbooks/Learning Resources:

Allen, Edward, and Joseph Iano. *Fundamentals of Building Construction: Materials and Methods* (John Wiley & Sons. 2008)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARST 201 Introduction to Mechanical and Electrical Systems, 3 credits

Course Description:

This course is intended to introduce to the concepts of environmental systems in architecture. Comfort, climate, passive systems, ventilation, mechanical systems and life safety are discussed in relation to their implication on architectural form and design.

Course Goals & Objectives:

- Students will develop analytic and critical skills through both research strategies and visual investigation of environmental systems.
- Students will develop analytical reasoning in order to be able to innovate using the learned tools.
- Students will gain a wider spread of systems applications into the design process.
- Students will acquire a background of renowned buildings, in and out of Puerto Rico, that utilize diverse environmental systems.

Student Performance Criteria addressed:

B.8. Environmental Systems, B.11. Building Service Systems

Topical Outline:

Introduction (10%)

Mechanical Systems (45%)

Electrical Systems (45%)

Prerequisites: ARST 101

Textbooks/Learning Resources:

American Institute of Architects. *Architectural Graphic Standards* (Wiley & Sons. 2007)
Chudley, Roy, and Roger Greeno. *Building Construction Handbook* (Butterworth-Heinemann. 2008)
Dadras, Aly S. *Electrical Systems for Architects* (McGraw-Hill. 1995)
Dadras, Aly S. *Mechanical Systems for Architects* (McGraw-Hill. 1995)
De Chiara, Joseph, and Michael J. Crosbie. *Time-Saver Standards for Building Types* (McGraw-Hill Professional Publishing. 2001)
Fukai, Dennis. *Being Sustainable: Building Systems Performance* (Insitebuilders. 2008)
McMorrough, Julia. *Materials, Structures, and Standards: All the Details Architects Need to Know But Can Never Find* (Rockport Publishers. 2006)
Stein, Ben. *Building Technology: Mechanical and Electrical Systems* (Wiley. 1997)
Watson, Donald, and Michael J. Crosbie. *Time Saver Standards for Architectural Design: Technical Data for Professional Practice* (McGraw-Hill Professional. 2004)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARST 301 Building Acoustics, Illumination, and Special Systems, 3 credits

Course Description:

This course focuses on the principles, design, application and performance of buildings as related to acoustics, lighting among other specialized systems. The course creates awareness of the principles driving these phenomena and their successful integration within buildings.

Course Goals & Objectives:

- Students will gain a wider spread of systems applications into the design process.
- Students will gain a wider spread of systems integration methodologies applied to architecture.
- Students will acquire a background of renowned buildings, in and out of Puerto Rico, that utilize diverse efficiency systems.

Student Performance Criteria addressed:

B.8. Environmental Systems

Topical Outline:

Introduction: Fundamentals, Concepts, and Principles (10%)

Acoustics (30%)

Illumination (30%)

Telecommunications (30%)

Prerequisites: ARST 201

Textbook/Learning Resources:

Ching, Francis D. K. *Building Construction Illustrated* (Wiley, 2014)

Long, Marshall. *Architectural Acoustics* (Academic Press. 2014)

Russell, Sage. *The Architecture of Light* (Conceptnine. 2012)

Offered (semester and year): Fall (regular) and spring (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

ARUS 101 Theory and Principles of Urban Design, 3 credits

Course Description:

Using theoretical orientations from landscape architecture, architecture, urban planning, geography, sociology, and cultural anthropology, this course investigates how social structures are spatially embedded within historical and contemporary urban realms. It explores both western and non-western environments within the context of place, culture, social behavior, infrastructures, density, zoning and projected development, among others.

Course Goals & Objectives:

- Students will obtain, develop and share knowledge of history and theory of urban design at a variety of scales and in various contexts.
- Students will be introduced to theory for both private and public practice of urban design.
- Students will understand the relationships between the different planning periods and movements.

Student Performance Criteria addressed:

A.9. Historical Traditions and Global Culture

Topical Outline:

Survey of urban design history (20%)

Methodologies for analysis of urban areas and territories (30%)

Social construction of urban space (20%)

Contemporary visions and contested principles in community design (15%)

Programming the urban surface (15%)

Prerequisites: ARHT 201

Textbooks/Learning Resources:

Bacon, Edmund. *Design of Cities* (Penguin Books. 1976)

Busquets, Joan, and Felipe Correa. *Cities X Lines: Approaches to City and Open Territory Design* (Harvard University Graduate School of Design. 2006)

De Solá-Morales, Manuel. *Diez lecciones sobre Barcelona* (Colegio de Arquitectos de Cataluña. 2008)

Rowe, Colin, and Fred Koetter. *Collage City* (The MIT Press. 1984)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See *Faculty Matrix* provided within *APR Part I.2.1*

ARUS 201 Territorial and Urban Public Policy in a Global Society, 3 credits

Course Description:

This course provides a comparative analysis of the changing nature of cities, economic adjustment and political structures, placing special emphasis on issues of policy and planning at different scales, and on current reforms in systems of urban governance. Through this exploration, awareness is raised of urban design as a product of systems rather than a free-standing, self-sustaining architectural phenomenon.

Course Goals & Objectives:

- Students will obtain, develop and share knowledge of theory and practice of planning and management at a variety of scales and in various contexts.
- Students will understand the relationships between the different planning policies.
- Students will understand the implementation processes and the inherent social impact of a project in its context.

Student Performance Criteria addressed:

C.9. Community and Social Responsibility

Topical Outline:

Public participation in the planning process (20%)

Urban governance (20%)

Urban sustainability (20%)

Public policy analysis (20%)

Policy alternatives for urban poverty (20%)

Prerequisites: ARUS 101

Textbooks/Learning Resources:

Coyula-Cowley, Mario, and others. *¿Quiénes hacen ciudad? Ambiente urbano y participación popular: Cuba, Puerto Rico, República Dominicana* (Ediciones SIAP. 1997)

Frieden, Bernard J., and Lynne B. Sagalyn. *Downtown, Inc.: How America Rebuilds Cities* (The MIT Press. 1991)

LeGates, Richard T., and Frederic Stout. *The City Reader* (Routledge. 2011)

Logan, John R., and Harvey Molotch. *Urban Fortunes: The Political Economy of Place* (University of California Press. 2007)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

**ARUS 301 Territorial Planning Strategies on Infrastructures and Communities,
3 credits**

Course Description:

This course aims to expand the implementation aspect of territorial planning into the more tangible condition of communities. Case studies are reviewed from Puerto Rico and around the world in an exploration of various models for promoting infrastructural improvement, economic health, distributing capital, understanding poverty and revitalizing low and moderate income neighborhoods in economically distressed communities.

Course Goals & Objectives:

- Students will obtain, develop and share knowledge of theory and practice of planning and management at the community context.
- Students will understand the consequences inherent to the implementation of different planning policies.
- Students will develop implementation skills for planning strategies to be socially effective.

Student Performance Criteria addressed:

C.2. Human Behavior

Topical Outline:

Hard infrastructure: mobility and public space (25%)

Hard infrastructure: territorial planning and land use (25%)

Soft infrastructure: intangible events and cultural anthropology (25%)

Soft infrastructure: socio-economical context (25%)

Prerequisites: ARUS 201

Textbooks/Learning Resources:

Bacon, Edmund. *Design of Cities* (Penguin Books. 1976)

Gottodiener, Mark, and Leslie Budd. *Key Concepts in Urban Studies* (SAGE Publications Ltd. 2005)

Lin, Jan, and Christopher Mele. *The Urban Sociology Reader* (Routledge. 2012)

Wellmann, K., and Marcus Spiller. *Urban Infrastructure: Finance and Management* (Wiley-Blackwell. 2012)

Offered (semester and year): Spring (regular) and fall (reposition); annually

Faculty assigned: See Faculty Matrix provided within APR Part I.2.1

IV.3. FACULTY RESUMES

Name: Agamemnon G. Pantel-Tekakis

Courses Taught:

ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems

ARAC 301 Conservation Planning Strategies and Policies

Educational Credentials:

- Ph.D. Anthropology/Archaeology – University of Tennessee, Knoxville. 1988
- Independent Training Program (ITP Architectural Conservation) – International Center for the Study of the Preservation and Restoration of Cultural Property (ICCROM), Rome Italy. 1984
- Educational Policy Fellowship –The George Washington University, San Juan/Washington,D.C. 1981
- Smithsonian Predoctoral Fellow – The Smithsonian Institution National Museum of Natural History, Washington, D.C. 1976
- Master of Arts Anthropology/Archeology – Miami University, Oxford Ohio. 1974
- Bachelor of Arts Classics – Miami University, Oxford Ohio. 1970

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture
- Adjunct, Polytechnic University of Puerto Rico, School of Architecture
- Adjunct, Escuela Superior Politécnica del Litoral (ESPOL), Guayaquil Ecuador
- Adjunct, University of Puerto Rico, Department of Sociology and Anthropology
- Adjunct, University of Tennessee, Department of Anthropology

Professional Experience:

- Principal, Pantel, del Cueto & Associates. (Guaynabo, Puerto Rico) 1985-Present
- Special Consultant in Archaeology – Programa Fomento al Turismo Ciudad Colonial de Ministerio de Turismo (Santo Domingo, Dominican Republic) 2013-2014
- Cultural Resources Consultant – Puerto Rico Environmental Quality Board/U.S. Environmental Protection Agency (San Juan, Puerto Rico) 1986-2013
- Project Conservator – Urban Train, Puerto Rico Highway Transportation Authority (San Juan, Puerto Rico) 1999-2010
- Director of Research – Foundation of Archaeology, Anthropology and History of Puerto Rico (San Juan, Puerto Rico) 1982-1997
- Heritage Resources Manager/Forest Archaeologist – U.S. Department of Agriculture, Forest Service (Caribbean National Forest, Puerto Rico) 1983-1993
- Deputy State Historic Preservation Officer/Associate Director Office of Cultural Affairs – Office of the Governor (San Juan, Puerto Rico) 1979-1982

Selected Publications and Recent Research:

- The Use of Ground Penetrating Radar (GPR) in the Documentation and Evaluation of Iglesia San José, San Juan, Puerto Rico. In, Change Over Time, School of Design, University of Pennsylvania. Philadelphia. 2012
- Is This REALLY 500 Years Old?: The Loss of Collective Memory in Historical Sites. Association for Preservation Technology International. Getty Grant Recipients Monographs on-line. Los Angeles, California. 2009
- Los Edificios Más Antiguos del Nuevo Mundo. El Caso de la Iglesia de San José en San Juan de Puerto Rico: Estudios Previos y Proyecto de Conservación. In Actas del Seminario: El Edificio en la Ciudad Histórica: Casos y Criterios de Intervención, Universidad Politécnica de Valencia, Programa de Master en Conservación del Patrimonio Arquitectónico, Valencia, España. 2008
- The First Caribbean People. Chapter 4 In General History of the Caribbean. Jalil Sued Badillo, Editor. UNESCO. Paris. 2002

Professional Memberships:

American Institute of Architects
ICOMOS-ICAHM Elected Member.
Sigma Xi, The Scientific Research Society [Honor Society].
The New York Academy of Sciences
American Anthropological Association
Society for American Archaeology
Society for Latin American Anthropology
Society for Historical Archaeology
ICCROM Alumni Association of North America

Name: Alberto Dueño-Jordán

Courses Taught:

ARAD 101 Fundamental Design Studio I
ARAD 102 Fundamental Design Studio II
ARAR 101 Digital Laboratory: Diagramming and Representation Techniques
ARAR 102 Digital Laboratory: Non-linear Diagramming and Complex Geometry

Educational Credentials:

- Master degree ARCH: visual simulation and 3d design in architecture, at the Polytechnic University of Catalunya (UPC) Barcelona (2006-2007)
- M.Arch, Louisiana State University (LSU)
- Polytechnic University of Virginia - Consortium at the WAAC (Washington Alexandria Architecture Center) advanced specialized studies in architecture) fall 2005.
- Sci-Arc, Making + meaning summer 2002

Teaching Experience:

- Adjunct, PUCPR School of Architecture Ponce, Puerto Rico 2009 –present
- Coordinator, ARAR Experimental Unit, PUCPR School of Architecture, 2009 –2014

Professional Experience:

- Principal, TAGd2 (Ponce, Puerto Rico) 2008–present
- Intern, Portal y Baibel Arquitectos (Barcelona, Spain) 2007
- Intern, Bonnin Orozco Arquitectos (Ponce, Puerto Rico) Summer 2006
- Intern, Jim Ritter Architects (Alexandria, Virginia)

Selected Publications and Recent Research:

- *SCRT2: Digital Representation Manual: Sequential Representational Theory and Technological Competence. (School of Architecture, PCUPR), Chief-Editor*
- *Behavioral Patterns: Student Work 2009 (School of Architecture, PCUPR), Co-Editor*

Licenses/Registration:

Puerto Rico Registered #20169

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
Safety Assesment Certification (post disaster safety assesment program for evaluators).

Name: Alejandro Mieses Castellanos

Courses Taught:

ARAD 101 Fundamental Design Studio I
ARAD 102 Fundamental Design Studio II
ARAD 201 Analytical Design Studio I
ARAD 401 Contextual Design Studio I
ARAR 201 Historical Documentation & Representation Techniques
ARAR 401 Scripting & Procedural Morphology
ARAR 201 Historical Documentation & Representation Techniques
ARAR 410 Architectural Representation | Independent Research
ARUS 101 Theory & Principles of Urban Design

Educational Credentials:

- M.Arch - Architectural Association, London, UK, 2009-2011
- B.Arch - Polytechnic University of Puerto Rico, Hato Rey, PR, 2002-2009

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture

Professional Experience:

- Coordinator of Architectural Representation Unit - PCUPR School of Architecture (Ponce, Puerto Rico) 2014 - Present
- Director of Interaction Design - postData.Design (Santurce, Puerto Rico) 2011-present
- Designer & Researcher - in.formation.studio (Gurabo, Puerto Rico) 2005-2011

Selected Publications and Recent Research:

- Rodríguez, Francisco; Marrero, Darwin. Contemporary Architecture in Puerto Rico : 1993-2010. University of Puerto Rico School of Architecture, San Juan, P.R, 2011.

Licenses/Registration:

CAAPPR #20305

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Alejandro Santiago-Villoch

Courses Taught:

ARHT 101 Architectural History I
ARAC 101 Fundamentals of Historic Preservation and Conservation
ARAD 102 Architectural Design Fundamentals II
ARAR 301 Parametric Modeling

Educational Credentials:

- B. Arch, Polytechnic University of Puerto Rico – Hato Rey, Puerto Rico, 2006

Teaching Experience:

- Adjunct, School of Architecture, Pontifical Catholic University of Puerto Rico 2010

Professional Experience:

- Intern, ETR Group (Ponce, Puerto Rico) 2012-present
- Intern, Mislá-Villalba (Ponce, Puerto Rico) 2010- 2011
- Intern, ATELIER 66, CSP (Ponce, Puerto Rico) 2002- 2010
- Intern, Anastylosis Restauro, Inc. (Ponce, Puerto Rico) 2002- 2010
- Intern, Versus (Rio Piedras, Puerto Rico) 2002-2004
- Intern, Erwin Rodriguez & Asociados (Santurce, Puerto Rico) 2000-2002
- Intern, Arq. Victor Diaz Paunetto (Hato Rey, Puerto Rico) 1999
- Intern, Praxis de Arquitectura Rio Piedras, Puerto Rico, 1996-1998

Selected Publications and Recent Research:

- Conference at ACSA 2000 Annual Meeting Los Angeles, California “*Nomad Dwellings*”
- Conference at ACSA 1999 Southeast Regional Conference San Juan, Puerto Rico “*Nomad Dwellings*”

Licenses/Registration:

Puerto Rico Registered - AIT Certificate #20067

Name: Alfred Cortés-González

Courses Taught:

ARSF 101 Architectural Structures I: Statics and Forces

ARSF 201 Architectural Structures II: Composite Construction on Wood and Steel

ARSF 301 Architectural Structures III: Monolithic Construction on Masonry and Concrete

Educational Credentials:

- M.Arch – University of Puerto Rico, Río Piedras 2000-2007
- B.S. Environmental Design – University of Puerto Rico, Río Piedras, 1995-1999
- A.D. Civil Engineering & Drafting - University of Puerto Rico, Ponce, 1992-1995

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico, School of Architecture
- Adjunct, Caribbean University of Puerto Rico, Engineering Department
- Adjunct, University of Puerto Rico, Engineering Department
- Adjunct, Pontifical Catholic University of Puerto Rico, Physics & Mathematics Department

Professional Experience:

- Research Intern & Designer - Dupont Pioneer (Salinas, Puerto Rico) 2012-Present
- Resident Architect - RMT & Associates, PSC (Ponce, Puerto Rico) 2007-2010
- Resident Construction Inspector - Livana Alta Developers Corp. (Ponce, Puerto Rico) 2007
- Project & Construction Manager - Avemarina Corporation (Ponce, Puerto Rico) 2000-2007
- Architectural Manager - Horacio Díaz & Associates, Eng. & Arch. (Ponce, Puerto Rico) 1999-2000

Selected Publications and Recent Research:

- Of Architecture, Ethics & Justice (De_Construcción column, Activate Magazine, 1st issue) 2012
- In search of a true Architecture (Submittal, De_Construcción column, Activate Magazine, 2nd issue) 2012
- Paper Bridges & Structures: An approach to structural bodies resistance and stiffness through form manipulation (Conference handout, Interamerican University CAMMC program Residential) 2010

Licenses/Registration:

Puerto Rico Registered AIT Certificate #20163

Puerto Rico Drafting License #3325

ACI Concrete Field Testing Technician Grade I #01246909

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Colegio de Delineantes de Puerto Rico (CDPR)

Name: Arnaldo Sanchez-Nuñez

Courses Taught:

ARAD 101 Fundamental Design Studio I
ARAD 202 Analytical Design Studio II
ARAD 301 Experimental Design Studio I

Educational Credentials:

- Master in Architecture (MArch II), Harvard University Graduate, *Cambridge, Mass, 2003*
- Bachelor of Architecture (BArch), University of Miami, *Coral Gables, Florida, 2000*

Teaching Experience:

- Adjunct, Pontifical Catholic University, 2011-Present
- Studio Instructor, Polytechnic University of Puerto Rico, *2007- 2009*
- Studio Instructor, University of Puerto Rico, *2004- 2007*
- Adjunct Professor, Auburn University, *Auburn, Alabama, Summer 2006*

Professional Experience:

- O1A, *Aguadilla, Puerto Rico*, Principal, 2011-Current
- ERERAS Arquitectos, *San Juan, Puerto Rico*, Project Manager, *2008-2010*
- Daniel Mercado Soto (PE), *Aguada, Puerto Rico*, Project Manager, *2005-2008*
- Fuster + Partners, *San Juan, Puerto Rico*, Architectural Internship, *2004*
- Caruncho, Martínez and Alvarez, *Miami, Florida*, Architectural Internship, *2001*
- Arquitectonica, *Miami, Florida*, Architectural Internship, *2000*

Selected Publications and Recent Research:

- “Patterned Skins” in Proceedings: End of in the Beginning: Realizing the Sustainable Imagination,
- National Conference on Beginning Design Student *NCBDS*, March 2012, School of Architecture at Penn State University, p. 334-339.
- “Casa Patio 1: Skinned Residential Field” in *d3: Dialog >Blur*, International Journal of Architecture and Design, New York, Forthcoming, 2012, <http://www.d3space.org/dialog/>.
- Casa Manaj + Casa Patio, *Contemporary Architecture in Puerto Rico 1993-2010*, Francisco Rodriguez, 2010.

Licenses/Registration:

Puerto Rico Licensed, No. 19795

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
American Institute of Architects (AIA)
National Council of Architectural Registration Boards (NCARB)

Name: Cynthia Burgos-López

Courses Taught:

ARAD 401 Landscape Ecology

Educational Credentials:

Ph.D candidate, Environmental Management , Turabo University, PR, 2015-

M.L.A, Polytechnic University of Puerto Rico, 2007-2010

B.S. Agronomy and Soil, University of Puerto Rico, 2002-2007

Teaching Experience:

Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture

Professional Experience:

Coordinator Urbanism and Communities, Urban Culture Fair (2014 to present)

President and Founder of "en la grama" NGO (2013 to present)

Head Landscape Designer and Ecology Consultant , kbzu2 Design (2011- to present)

Environmental Consultant to Eng. Sonia López, Ponce PR (2007-2014)

Intern, NRCS-USDA, Lafayettee, Indiana 2006-2007

Selected PublicaCons and Recent Research:

2009 Charettee Puerto Bahía Roosevelt Roads - Entorno Magazine

2013 Year of Public Service Stories - ASLA

2014 Research: Under used and abandoned spaces as catalyst of new economy.

Licenses/Registration:

CAAPR Landscape Architect License #54

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Colegio de Agrónomos de Puerto Rico (CAPR)

Hispanic AssociaCon of Colleges and UniversiCes (HACU)

American Society of Landscape Architects (ASLA)

American Waterworks AssociaCon (AWWA)

Name: Drianfel E. Vázquez-Torres, MS, Ph.D, JD

Courses Taught:

ARSF 101 Architectural Structures I: Statics and Strength
ARSF 201 Architectural Structures II: Composite Construction on Wood and Steel
ARSF 301 Architectural Structures III: Monolithic Construction on Masonry and Concrete
ARAR 302 Digital Representation Systems, Parametric Detailing

Educational Credentials:

- J.D., Juris Doctor, School of Law, Pontifical Catholic University of Puerto Rico (2007-2010)
- Ph.D., Structural Engineering (Geotechnical Engineering minor), School of Engineering, University of Puerto Rico at Mayagüez, (2002)
- M.S., Structural Engineering (Construction Management minor), School of Engineering, University of Puerto Rico at Mayagüez, (2000)
- B.S., Civil Engineering, School of Engineering, University of Puerto Rico, Mayagüez Campus, Puerto Rico, (1998)

Teaching Experience:

- Full Professor, University of Puerto Rico at Ponce 2013 – Present
- Associate Professor, University of Puerto Rico at Ponce 2007 – 2013
- Assistant Professor, University of Puerto Rico at Ponce 2002 – 2007
- Adjunct, Pontifical University of Puerto Rico (School of Architecture) 2010 – Present
- Adjunct, Caribbean University School of Engineering 2010 – Present
- Adjunct, School of Engineering, University of Puerto Rico, Mayagüez Campus. 1998 – 2001

Professional Experience:

- Chancellor (Acting), University of Puerto Rico at Ponce, (2014)
- Dean of Administrative Affairs, University of Puerto Rico at Ponce (2013)
- Dean of Administrative Affairs, University of Puerto Rico at Ponce (2007 – 2009)
- Project Director, U.S. Department of Education Project, MSEIP (2007 – 2010)
- Project Director, FEMA, Development of the Multi Hazard Mitigation Plan for UPRP (2007 – 2010)
- Witness Expert, Linear and Nonlinear Structural Evaluation of Structures (2002-Present)
- Witness Expert, Traffic Accident Reconstruction (2009-Present)
- Chancellor Assistant for Special Projects, University of Puerto Rico at Ponce, 2014 - Present

Selected Publications and Recent Research:

- Vázquez, D., Suárez, L., (2014) “Análisis Estructural con SAP2000; Estático y Dinámico”, Amazon, ISBN-10: 1500633348, ISBN-13: 978-1500633349
- Arroyo J., Vázquez D., (2008) “Seismic Evaluation of Reinforced Concrete Residential Structures with Non-Rigid Connections, Part III” – Non-Linear Dynamic

Analysis, Official National State Board of Engineering Journal, Dimensión, Revista del Colegio de Ingenieros y Agrimensores de Puerto Rico, Año 22. Vol. 1, 2008

- Vázquez D, Vázquez Y, (2008), Desarrollo Sostenible y el Derecho de Propiedad. Ceiba 2008-2009-Año 8, Núm. 1, (Segunda Época), Revista de la Universidad de Puerto Rico en Ponce
- Non-Linear Static Analysis of Reinforced Concrete Residential Structure with Non-Fixed Connections (BOOK) Forensic Engineering: Proceedings of the Fourth Congress, Edited by, Paul A. Bosela, Norbert J. Delatte (2007)

Licenses/Registration:

Puerto Rico Licensed, Professional Engineer, PE Lic. 20355

Puerto Rico Licensed, Attorney at Law and Public Notary, RUA Lic. 18599

Professional Memberships:

College of Engineers and Surveyors of Puerto Rico, (CIAPR)

Institute of Civil Engineers, (IIC)

College of Lawyers of Puerto Rico, (CAPR)

American Bar Association, (ABA)

Society of Automotive Engineers, (SAE)

National Association of Professional Accident Reconstruction Specialists, (NAPARS)

Name: Edgar Morell-Rivera

Courses Taught:

ARST 101 Tectonics on Material Applications and Methods
ARST 201 Introduction to Mechanical and Electrical Systems

Educational Credentials:

- M.Arch., Graduate School of Architecture, University of Puerto Rico, Río Piedras, 1993-1996
- B.E.D., School of Architecture, University of Puerto Rico, Río Piedras, 1988-1993

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture
- Adjunct, Escuela Internacional de Diseño y Arquitectura, Universidad del Turabo

Professional Experience:

- President /Architect / Project Manager - E.Morell-Rivera Architects & Consultants, PSC. (Guaynabo, Puerto Rico) 2003 – Present
- Board member (Secretary) of Colegio de Arquitectos y Arquitectos Paisajistas de PR (CAAPPR)
- 2009-2013
- Architectural Department Manager - Raymond Professional Group (Caguas, Puerto Rico) 2001-2003
- Associate Architect - LGScott (Guaynabo, Puerto Rico) 1998-2001
- Architect in Training - The Regis Group, (Old San Juan, Puerto Rico) 1997 - 1998
- Architect in Training - Baralt-Masini Architects, (Río Piedras, Puerto Rico) 1996 - 1997

Selected Publications and Recent Research:

- Master Degree Thesis: Hogar de Carácter Temporero para desamparados en el Área Central de Ponce" (Short Term Transitional Home for Homeless People at the Ponce Central Area) 1996.
- Lecture @ CAAPPR: Pharmaceutical Design Facilities. February 20, 2013

Licenses/Registration:

Licensed Architect, Puerto Rico #16176

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
American Institute of Architects (AIA) # 30214797
National Council of Architectural Registration Board (NCARB) # 66256

Name: Edlyn García-La Torre

Courses Taught:

ARAD 102 Fundamental Design Studio II
ARAD 202 Analytical Design Studio II
ARAD 402 Contextual Design Studio II
ARST 403 Leadership in Green Building Design and Construction

Educational Credentials:

- M. Bioclimatic Arch, ETSAM Polytechnic University of Madrid, Spain, 2011-2012
- B.Arch., Polytechnic University of Puerto Rico, 2003-2009

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture

Professional Experience:

- Architect in Training, E-Morell Rivera Architects (Guaynabo, Puerto Rico) 2013-present
- Architect in Training, Quality Construction Services, SE (San Juan, Puerto Rico) 2010-2013
- Architectural Assistant, E-Morell Rivera Architects (Guaynabo, Puerto Rico) 2007-2010
- Intern, Urbana/Arquitectura (Miramar, Puerto Rico) 2006-2007

Selected Publications and Recent Research:

- 2014 - Present: Bioclimatic Skins: Rethinking the Building Envelope Through Thermoregulation Strategies and Technics of Living Organisms, SEEDs Funded research project, (*School of Architecture, PCUPR*), *Principal Researcher*
- 2014 Biotectónica- CienciaPR: Scientific blog (*CienciaPR*), *Co-Editor*
- 2013-Science from a Design Studio" Article written by Wilfredo Mendez and Edlyn García about Biotectónica R&D published in: cienciapr.com elperiodicopr.com dialogodigital.com
- 2013-The Skin as an Organ: Biomimetic Influences in the Passive Strategies of Bioclimatic Architecture Article from master's thesis published in the journal: *Ambitat* 2012 in madrid, Spain.

Licenses/Registration:

Puerto Rico Registered 20308

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
USGBC US-Caribbean Chapter

Name: Emmanuel Báez-Rivera

Courses Taught:

ARAR 101 Digital Representation, *Pontifical Catholic University of Puerto Rico*
ARAR 102 Digital Representation II, *Pontifical Catholic University of Puerto Rico*
ARAR 301 Parametric Modeling, *Pontifical Catholic University of Puerto Rico*
ARAR 302 Parametric Modeling II, *Pontifical Catholic University of Puerto Rico*
ARAR 420 Digital Representation – Independent Research II, *Pontifical Catholic University of Puerto Rico*
GEEN 104 Engineering Graphics I, *Caribbean University*
GEEN 105 Engineering Graphics II, *Caribbean University*
GEEN 106 Computer Graphics & Design I, *Caribbean University*
GEEN 108 Computer Graphics & Design II, *Caribbean University*

Educational credentials:

- B. Arch, Polytechnic University of Puerto Rico 2006
- Associate Degree in Architecture Draftsman, University of Puerto Rico 1997
- Associate Degree in Civil Engineering, University of Puerto Rico 1997

Teaching experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture 2009-present
- Instructor, Caribbean University (Ponce, Puerto Rico) 2006-present

Professional experience:

- Designer, CMA Architects and Engineers (Guaynabo, Puerto Rico 2012-2013)
- Designer, Mislá Villalba Enterprises (Ponce, Puerto Rico 2010-to present)
- Designer, LPAgroup (Ponce, Puerto Rico 2001-2008)
- Cad Operator, C & H Systems, Inc. (Ponce, Puerto Rico 1996 to 1998)

Licenses/Registration:

Puerto Rico Registered

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Ernesto Amador-Miranda

Courses Taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II
ARAD 401 Contextual Design Studio I
ARAD 402 Contextual Design Studio II

Educational Credentials:

- B.Arch., Cornell University, Ithaca, New York, 1995-1998
- B.E.D., University of Puerto Rico, Rio Piedras, P.R. 1991-1995
- Study Abroad, Catholic University of America, Washington D.C. 1993

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture
- Adjunct, Escuela Internacional de Diseño, Universidad del Turabo, Gurabo P.R.
- Teaching Assistant, Cornell University, Ithaca, N.Y., 1996-1998

Professional Experience:

- Designer & Project Management-eamstudio (San Juan) 2009-Present
- Project Management - Miles Associates (Oklahoma, San Juan, Antigua) 2006-2012
- Project Management - The Building Studio (New York, San Juan) 2005-2006
- Designer & Project Management - Córdova, Conde y Asociados (San Juan) 2000-2005
- Designer - Plan de Ordenación Territorial de San Juan (San Juan) 1998-2000
- Intern - Sierra, Cardona, Ferre SFC (Guaynabo) 1993
- Intern - Héctor Arce & Associates 1992

Selected Publications and Recent Research:

- Mi Puerto Rico Verde. Digital Media (*San Juan*), *Editor*

Licenses/Registration:

Puerto Rico Registered - AIT Certificate #17397

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Ernesto Vázquez-González

Courses Taught (One Academic Year prior to current visit):

ARAR 101 Digital Laboratory: Diagramming and Representation Techniques

ARAR 102 Digital Laboratory: Non-linear Diagramming and Complex Geometry

ARAR 401 Digital Laboratory: Scripting and Procedural Morphology

Educational Credentials:

- M.Arch., University of Puerto Rico, 2009
- Urban and Historic Patrimonial Studies Program Certification, Università di Corsica Pascualle Paoli, Corse. France, 2008
- B.Arch., University of Puerto Rico, 2007
- Escuela Técnica Superior de Arquitectura, Seville. Spain, 2006

Teaching Experience:

- Adjunct, School of Architecture at Pontifical Catholic University, 2010-present
- Teaching Assistant, School of Architecture at University of Puerto Rico, 2005-2007

Professional Experience:

- Architect in Training, Cue & Lopez Construction, San Juan, PR. 2012
- Adjunct, School of Architecture, Pontifical Catholic University, Ponce. 2010-present
- Architect in Training, Adaptable Paths Inc, San Juan, PR. 2010-present
- Erik A. Rosado Pérez Law Firm, San Juan 2009-2010

Licenses/Registration:

Puerto Rico Registered

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Eugenio Ramírez-Ballagas

Courses Taught:

ARAD 101 Fundamental Design Studio I
ARAD 420 Developmental Design Studio II
ARST 301 Introduction to Mechanical and Electrical Systems

Educational Credentials:

- M.Arch, Virginia Polytechnic and State University, Blacksburg Virginia, 1997-2000
- B.E.D., Escuela de Arquitectura Universidad de Puerto Rico, 1992-1997

Teaching Experience:

- Adjunct, Escuela de Arquitectura, Universidad de Puerto Rico
- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture

Professional Experience:

- Principal Architect, ERERAS arquitectos, *San Juan, Puerto Rico.2009-Current.*
- Partner The Arc Development Group LLC (Construction and Development), *San Juan, Puerto Rico.2011-Current.*
- Architect, Fuster + Partners, C.S.P. · Hato Rey, Puerto Rico.2004-2005.
- Architect, Luis Flores Arquitectos · Miramar, Puerto Rico.2004-2005.
- Architect Consultant, Moisés Cordero Arquitectos · Hato Rey, Puerto Rico.2002-2005.
- Project Management, Oficina Estatal de Preservación Histórica · San Juan, Puerto Rico. 2002-2003.
- Architect, WQRKS · Alameda, CA, United States. 2002.
- Architect, m.arch.twelve · Emeryville, CA, United States.2001-2002.
- Architect, Lundberg Design · San Francisco, CA, United States. 2001-2002.

Selected Publications and Recent Research:

- "Coversar/Conservar" Revista Entorno 22, Work resembled in publication, 2013
- "Vivienda Acequible" Revista Entorno 21, Work resembled in publication, 2012
- "Arquitectura Contemporanea en Puerto Rico 1993-2010", Work resembled in book
- "Te quiero Verde" Revista Entorno 13, Work resembled in publication, 2009
- "20 firmas/ 40 proyectos" Revista Arq.i.tec #43, Work resembled in publication
- "30 firmas/ 65 proyectos" Revista Arq.i.tec #42, Work resembled in publication

Licenses/Registration:

Puerto Rico Licensed #19796

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
American Institute of Architects (AIA)

Name: Fernando Pabón-Rico

Courses Taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 201 Analytical Design Studio I
ARAD 402 Contextual Design Studio II
ARUS 101 Theory and Principles of Urban Design
ARUS 301 Territorial Planning Strategies on Infrastructure and Communities

Educational Credentials:

- B. Arch., Syracuse University, 2006
- European Postgraduate Master's in Urbanism (M. U.D.), Universitat Politècnica de Catalunya, 2011

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico, 2012-present
- Instructor, Berlitz Language Center, Washington, D.C., 2009

Professional Experience:

- Architectural Designer, FEFGroup, San Juan, 2014
- Intern Architect, Bonnin Orozco Arquitectos, Ponce, 2014
- Intern Architect, Lehman Smith & McLeish, Washington, D.C., 2006-2008
- Intern, Intergruop, Bayamón, 2004

Selected Publications and Recent Research:

- Pabón, F. Coord. *Diálogo Interdisciplinar, Vidas Paralelas: Percepción del Entorno en los Mundos Virtuales*, (Ponce, 2012)
- Alba, A. *Revista de Historia y Teoría de la Arquitectura Costa del Sol, Infraestructura y Forma Urbana*. (Sevilla, 2011)
- Martínez, F. ed. *Revista arq.i.tec Entrevista a Leonardo Pérez*. (San Juan, 2010)
- Font, A. ed. *Reforma de la Diagonal de Barcelona: Espacio público + Transporte colectivo*. (Barcelona, 2010)
- Kamell, E. Ed, *Envisioning Chittenango, 2020: A master plan for a small town*. (Syracuse, 2008)

Licenses/Registration:

Puerto Rico Registered - AIT Certificate 21715

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Gerardo Mislá-Villalba

Courses Taught:

ARDA 101 Entrepreneurship on Developmental Politics

ARDA 201 Economic Feasibility and Finances on Real Estate

Educational Credentials:

- Masters of Science in Construction Management– Florida International University, Miami, FL, 2000-2001
- B.S. Civil Engineering - University of Puerto Rico, Mayaguez, 1994-1999

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture

Professional Experience:

- Designer/ Construction Supervisor, Estancias del Monte Subdivision (Ponce, Puerto Rico) 2013-Present
- President, Mislá-Villalba PSC (Ponce, Puerto Rico) 2010-Present
- Construction Supervisor, New Ponce Civic and Administration Center (Ponce, Puerto Rico) 2011-2013
- Design Engineer, New Ponce Civic and Administration Center (Ponce, Puerto Rico) 2010-2011
- Construction Supervisor, PCUPR New Biotechnology Research Center (Ponce, Puerto Rico) 2009-2011

Licenses/Registration:

Puerto Rico Professional Licensed Engineer #18143

OGPe Authorized Professional – License # 02680-PRO-02120

Professional Memberships:

Colegio de Ingenieros y Agrimensores de Puerto Rico (CIAPR)

Name: Humberto J. Betancourt-Torres

Courses Taught:

ARAD 410 Developmental Design Studio I
ARAD 420 Developmental Design Studio II

Educational Credentials:

- B.Arch., The Cooper Union, New York City, 1980-1982
- B.E.D., University of Puerto Rico, Río Piedras, 1977-1980 (degree not completed)

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico, School of Architecture, 2015-Present
- Associate Professor, Polytechnic University of Puerto Rico, New School of Architecture, 2010-2011
- Studio Critic, Catholic University of America, School of Architecture and Planning, 1995-2003
- Assistant Professor, University of Puerto Rico, School of Architecture, 1992-2000
- Visiting Critic (Pontifical Catholic University of Puerto Rico, University of Puerto Rico, Virginia Polytechnic Institute, Virginia State University (Washington-Alexandria Architecture Consortium), Rhode Island School of Design, Arizona State University, Polytechnic University of Puerto Rico) 1996-Present

Professional Experience:

- Principal, HiDDeNLoGiC (a non-governmental organization) 2011-Present
- Associate Dean, Polytechnic University of Puerto Rico, New School of Architecture, 2010-2011
- Director of Summer Programs, Catholic University of America, School of Architecture and Planning, 2003
- Acting Graduate Program Coordinator, University of Puerto Rico, School of Architecture, 1993-1994
- Principal, Humberto Betancourt Arquitecto, 1992-Present

Selected Publications and Recent Research:

- 2015 Planning for the Next Helsinki, Competition proposal
- 2013 HiDDeNLoGiC, Online Architecture MapGuides, Ongoing research and publication
- 2011 arq.i.tec, arq(i)folio 5.2, Arquitectura en la UPR, UPRb Science and Technology Complex

Licenses/Registration:

Puerto Rico Licensed #9655

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Iván García-Zapata

Courses Taught:

ARLA 101 Codes and Regulations in Architectural Design

ARLA 201 Professional Practice and Contractual Procedures in Architecture

Educational Credentials:

- M.P.A, University of Columbia (New York, NY) 2007-2009
- L.L.M., Universidad Complutense de Madrid, (Madrid, Spain) 2001-2002
- J.D., University of Puerto Rico School of Law (Rio Piedras, PR) 1996-1999

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture
- Adjunct, University of Puerto Rico School of Law

Professional Experience:

- President, García, Aponte & Quiñones, LLC - (San Juan, PR) 2011-Present
- President, Iván García-Zapata Law Offices (San Juan, PR) 2009-Present
- General Counsel, University of Puerto Rico (San Juan, PR) 2004-2009
- Legal Counsel, University of Puerto Rico Medical Sciences Campus (San Juan, PR) 2002-2004
- Associate Attorney, Saldaña, Saldaña-Egozcue & Vallecillo, PSC (San Juan, PR) 2002-2003; 1999-2001
- Financial Analyst & Profit Forecaster, Procter and Gamble (San Juan, PR) 1993-1996

Selected Publications and Recent Research:

- Being Accountable: The Challenges to Improve Public Schools in Puerto Rico (Co-authorship with Torres Llompart & Sánchez Ruiz, LLP & José A. Martínez Ed.D.); Published by Flamboyant Foundation. 2010
- "La Profundidad en el Pensamiento y la Rigurosidad en el Método" de Lino J. Saldaña, 76 Rev. Jur. UPR 565 (2007).

Licenses/Registration:

Puerto Rico License No. 13106

Public Notary in Puerto Rico License No. 13106

US District Court for the District of Puerto Rico License No. 219108

US Court of Appeals for the First Circuit

Certified Public Accountant (PR License No. 4154)

Professional Memberships:

Colegio de Abogados de Puerto Rico

Name: Javier L. Bonnín-Orozco

Courses Taught:

ARAD 301 Experimental Design Studio II
ARAD 402 Developmental Design Studio II

Educational Credentials:

- M.Arch, Georgia Institute of Technology, Atlanta, 1984-1986
- B.S. (in Architecture), Georgia Institute of Technology, Atlanta, 1977-1981

Teaching Experience:

- Coordinator, ARUS Experimental Unit, PCUPR School of Architecture (2012-present)
- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture (2011-present)
- Adjunct, University of Puerto Rico's School of Architecture, 2001-2002

Professional Experience:

- Principal, Bonnín Orozco Arquitectos, PSC (Ponce, Puerto Rico) 1998 – Present
- Chief Advisor, San Juan's Territorial Plan (Municipality of San Juan, PR) 1998-2000
- Director, Ponce's Territorial Planning Office (Municipality of Ponce) 1993-1998
- Chief Architect, Ponce's Master Plan Office (Municipality of Ponce) 1990-1992
- Director, Ponce's Historic Center Office (Institute of Puertorican Culture) 1989-1990
- Local Director, Ponce's Historic Center Revitalization Plan (IPC) 1988-1989
- Architecture Advisor, Institute of Puertorican Culture (Ponce's Regional Office) 1987-1988
- Intern, LPA Architects and Engineers (Ponce, Puerto Rico) 1986-1987
- Intern, Perkins + Will (Nix, Mann and Assoc.) Atlanta, 1983-1986

Selected Publications and Recent Research:

- *Ponce: Architecture and Identity* (Lecture), Institute of Fine Arts, New York University. 2011
- Andemos San Juan. (Article) Revista Entorno, Vol. 1. (CAAPPR). August 2006.
- Habitando el Espacio Público: Entre Edificios, Automoviles, Paredes y Pantallas (Article) Revista (in)FormA, (Article), School of Architecture of the University of Puerto Rico, Vol. 1, 2001.

Licenses/Registration:

Puerto Rico Licensed #12518

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
American Institute of Architects
US Green Building Council, LEED AP

Name: Javier de Jesús-Martínez

Courses taught:

ARAD 401 Contextual Design Studios I
ARAD 410 Developmental Design Studio I

Educational Credentials:

- B. Arch., The Cooper Union, Irwin S. Chanin School of Architecture, 1997
- B.E.D., University of Puerto Rico, 1990-1995

Teaching Experience:

- Instructor, School of Architecture, University of Puerto Rico, 1997-2006
- Associate Dean, School of Architecture, University of Puerto Rico, 2000-2003
- Adjunct, School of Architecture, University of Puerto Rico, 2007-2009

Professional Experience:

- Interim Dean, Pontifical Catholic University of Puerto Rico, 2012-2014
- Associate Dean, Pontifical Catholic University of Puerto Rico, 2009-2012
- Principal, Adaptable Paths, 2007-present
- Advisor to the Governor, San Juan, Puerto Rico, 2005-2007
- Design and Construction Director, University of Puerto Rico, 2003-2005
- Design Director, Grupo Folium-Interdisciplinary Practice & Design Consultant, 2000-2003
- Urban Designer and Consultant, Territorial Plan Office, San Juan, Puerto Rico, 1998-2000

Selected Publications and Recent Research:

- *Ética Alternómica: Tácticas para la Intersección de lo Local y lo Global. (IN)-FormA (2001)*
- *From the Internal to the Radical: Autonomy and Alterity in the Local Modern, ACSA Northeast Regional Meeting Proceedings, (IN)-FormA (2001)*
- *"Conversión pos-humanista" (IN)-FormA (2001)*

Licenses/Registration:

Puerto Rico Registered

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto

Name: Jesús García-Beauchamp

Courses Taught

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II
ARAD 201 Analytical Design Studio I
ARAD 301 Experimental Design Studio I
ARAD 302 Experimental Design Studio II
ARST 401 Morphology of Glass and Light

Educational Credentials

- B.Arch, Polytechnic University of Puerto Rico, 1995-2000

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture (2009-present)

Professional Experience:

- Architect in training, Arquitectura 3AV, CSP, Ponce P.R., 2010 - Present
- Architect in training, Visura CSP, Ponce P.R., 2005 – 2010
- Architect in training, Atelier 66 CSP, Ponce P.R., 2002 – 2005
- Architect in training, Agrait Betancourt Architects, San Juan P.R., and 2001 – 2002
- Intern, Toro Ferrer Architects, San Juan P.R., and 1998 - 1999

Selected Publications and Recent Research:

- Architecture and Cinema, time + movement: Architecture. City.Cinema.

Licenses/Registration:

Puerto Rico Registered – AIT Certificate

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico, (CAAPPR)

Name: Joel A. Montalvo-Bonilla

Courses Taught:

ARLA 101 Codes and Regulations in Architectural Design

ARLA 201 Professional Practice and Contractual Procedures in Architecture

Educational Credentials:

- L.L.M., The George Washington University, School of Law, Washington, DC, 2002-2003
- J.D., Pontifical Catholic University of Puerto Rico, School of Law, Ponce, PR, 1999-2001
- B.A., Inter-American University of Puerto Rico, San German, PR, 1994-1999

Teaching Experience:

- Coordinator, ARUS Experimental Unit, PCUPR School of Architecture (2012-present)
- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture (2009-present)
- Adjunct, University of the Sacred Heart, 2009-

Professional Experience:

- Principal, The Optim Group, 2009-Present
- Legislative Director, Office of the Governor, Commonwealth of Puerto Rico, 2005-2008
- Legislative Assistant, US House of Representatives, 2002-2004
- Attorney, Office of POA Law, 2001-2002
- Intern, US House of Representatives, 1997

Selected Publications and Recent Research:

- *El cotejo de recibos al salir de un establecimiento comercial.* REVISTA DE DERECHO PUERTORRIQUEÑO. 39 REV. D.P. 375 (2000)

Licenses/Registration:

District of Columbia

Professional Memberships:

American Bar Association

Name: José Muñoz-Báez

Courses Taught:

ARHT 101: Architectural History I Ancient to Renaissance - Theory

ARAD 202: Analytical Design Studio II: Adaptive Conservation and Preservation

ARAC 101: Fundamentals of Historic Preservation and Conservation

Educational Credentials:

- B.Arch, Rhode Island School of Design, 1993

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2011-
- Adjunct, Universidad Politécnica de Puerto Rico, (Hato Rey, PR) 2008-2010
- Instructor, Universidad Interamericana de Puerto Rico, (San Germán, PR) 1995-2005

Professional Experience:

- José M. Muñoz, Arquitecto, Owner, since 2010 to date
- Supervisor, Tax Credit Urban Renewal Program Dept. of Transportation and Public Works, Puerto Rico (DTOP) 2006 – 2009, (Ley 212 Rehabilitación de Centros Urbanos)
- Director, Instituto de Cultura Puertorriqueña (Mayagüez, PR) 2002- 2006
- Architect, Interfinancial Development Corp. (Mayagüez, PR) 1998-2002
- Project Manager, Enrique Figueroa, Arquitecto (Mayagüez, PR) 1995-1998
- Intern, Amadeo Pino, Arquitecto (Mayagüez, PR) 1992-1993

Licenses/Registration:

Puerto Rico Licence #15264

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Jose Pagán-Parés

Courses Taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II
ARAD 201 Analytical Design Studio I
ARSF 101 Architectural Structures I: Statics and Strength
ARAD 302 Experimental Design Studio II

Education Credentials:

- B.E.D., School of Architecture, University of Puerto Rico, 2000
- M. Arch., Illinois Institute of Technology, 2000
- M. in Design and Restoration of Architectonic Structures, Polytechnic Univ. of Catalonia, 2006

Teaching Experience:

- Coordinator, ARSF Experimental Unit, PCUPR School of Architecture (2012-present)
- Adjunct, Pontifical Catholic University of Puerto Rico, 2009-present
- Teacher Assistant, Illinois Institute of Technology, 2001-2002
- Teacher Assistant, University of Puerto Rico, 1998-2000

Professional Experience:

- Project Architect, SPACES ARCHITECTS, PSC, San Juan, PR, 2010-present
- Project Architect, Fuster+Partners Architects, PSC, San Juan, PR, 2009-2010
- Project Architect, Mercé Martínez Martín Arquitecta, Barcelona, Spain, 2004-2008
- Project Architect, Albisu-Pradell Arquitectos SCP, Barcelona, Spain, 2004-2007
- Architect, SPACES -Architects, San Juan, PR, 2003-2004
- Intern, GENSLER, Chicago, IL, 2002-2003

Selected Publications/Recent Research:

- “Criollo Dream: Re-Configuration of the Urban Landscape of San Juan, Puerto Rico”, Illinois Institute of Technology, 2003
- “Structural Analysis of Double Curvature Masonry Vault: Warehouse Julio Herrera y Obes, Eladio Dieste”, Polytechnic University of Catalonia, 2006

Registration:

Puerto Rico Licensed 19935

Professional Membership:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Juan Cebollero-Torres

Courses Taught:

ARST 101 Tectonics on Material Applications and Methods
ARST 201 Introduction to Mechanical and Electrical Systems
ARST 301 Building Acoustics, Illumination, and Special Systems
ARAR 301 Digital Representation Systems, Parametric Modeling

Educational Credentials:

- M. Arch., University of Wisconsin-Milwaukee, 2003
- B.S.A.S, University of Wisconsin-Milwaukee, 1999

Teaching Experience:

- Instructor, Universidad del Este, 2011
- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2010-2013
- Teacher Assistant, Universidad Interamericana de Puerto Rico, 1999 and 2003

Professional Experience:

- Architect, CMA, Inc., San Juan, Puerto Rico, 2013-2014
- Principal, Arquitecto Cebollero, 2010 - Present
- Architect, Mead & Hunt, Inc., Madison, WI, 2007 – 2009
- Project Specialist II, Plunkett Raysich Architects, Madison, WI, 2004 – 2007
- Designer, Plunkett Raysich Architects, Milwaukee, WI, 2000 – 2001

Licenses/Registration:

Puerto Rico Licensed
Wisconsin Licensed

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico [CAAPPR]

Name: Juan Emmanuelli-Benvenuti

Courses Taught:

ARAD 101 Fundamental Design Studio I
ARAD 102 Fundamental Design Studio II
ARAD 201 Analytical Design Studio I: Architectural History and Culture
ARAD 301 Experimental Design Studio I: Sustainable Technologies
ARAD 420 Developmental Design Studio II

Educational Credentials:

- M.Arch., University of Wisconsin, Milwaukee, 1996-1999
- B.S.A.S., University of Wisconsin, Milwaukee, 1992-1996
- B.S. Civil Engineering – University of Puerto Rico, Mayaguez, 1990-1992 (degree not completed)

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2009-

Professional Experience:

- Operations Coordinator, PCUPR School of Architecture (Ponce) 2009-Present
- Regent for Academic Affairs, PCUPR School of Architecture(Ponce) 2009-Present
- Architectural Designer, CMA Architects and Engineers (Guaynabo, Puerto Rico) 2007-2008
- Architectural Designer, AESC/Anima (Ponce, Puerto Rico) 2005-2007
- Architectural Designer, Marmon Mok, LLP (San Antonio, Texas) 2001-2005
- Intern, Kahler Slater Architects (Milwaukee, Wisconsin) 1999-2001

Selected Publications and Recent Research:

- 2011 Decade of Design: The AIA Urban and Regional Solutions Challenge (submittal)
- 2010 Patterns in Nature:Behavioral Patterns, PCUPR School of Architecture
- *Substantive Change Request (School of Architecture, PCUPR)*, MSCHE, 2009
- NAAB APR-IC (*School of Architecture, PCUPR*), Co-Editor
- NAAB APR-CC (*School of Architecture, PCUPR*), Co-Editor
- NAAB APR-IA (*School of Architecture, PCUPR*), Co-Editor

Licenses/Registration:

Puerto Rico Licensed 21702

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Lily Riefkohl-Ortiz

Courses Taught:

- ARAR 301 Parametric Modeling
- ARAR 302 Parametric Detailing

Educational Credentials:

- M.Arch., Savannah College of Art and Design, 2012
- B.E.D., University of Puerto Rico, 2009

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2012-

Professional Experience:

- Program Director, Complejo Ferial de Puerto Rico, 2014-Present
- Intern, R & F Consultants and Developers, San Juan, PR, 2012-2014
- Intern, Genie Pools, Miami FL, 2011
- Intern, NOP Group, Guaynabo Puerto Rico, 2005-2009
- Intern, Cue & Lopez, San Juan PR, 2004-2008
- Intern, Edgardo Perez Architects + Associates, Hato Rey, Puerto Rico, Summer 2006

Licenses/Registration:

Puerto Rico Registered

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
American Institute of Architects

Name: Lorna Báez-Amely

Courses Taught:

ARDA 101 Entrepreneurship on Developmental Politics

ARDA 301 Marketing and Branding through Commercial Communication Skills

Educational Credentials:

- M.B.A. in Human Resources, Pontifical Catholic University of Puerto Rico, Ponce Campus
- B.A. in Finance, University of Puerto Rico, Mayaguez Campus
- Certified Real Estate Appraiser

Teaching Experience:

- Coordinator, ARDA Experimental Unit, PCUPR School of Architecture (2012-present)
- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture
- Adjunct, Interamerican University of Puerto Rico
- Public Speaker for Entrepreneurship

Professional Experience:

- Coordinator of International Affairs, Development and Community, PCUPR School of Architecture (Ponce, Puerto Rico) 2013-Present
- Director, Small Business Turnaround Prog. (PR SBTDC) (San Juan, Puerto Rico) 2005 - 2013

Selected Publications and Recent Research:

- Comercio en Grande. Revista Centro Unido Detallistas.
- Mantenga su Negocio Competitivo ante las Multinacionales. ASQ1500 Website
- Especialícese y diversifíquese. El Nuevo Día.
- Píldora Empresarial. El Nuevo Día.

Licenses/Registration:

Certified Quality Improvement Associate by American Society for Quality, since 2010

Professional Memberships:

American Society for Quality, Member since 2006 (64045371)

Name: Luis Ayala-Rubio

Courses taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II
ARAD 201 Analytical Design Studio I
ARAD 202 Analytical Design Studio II
ARAD 301 Experimental Design Studio I
ARAD 302 Experimental Design Studio II
ARAD 402 Contextual Design Studio II

Educational Credentials:

- M. Arch., Tulane University School of Architecture – New Orleans, LA, 2004
- B. Arch, Tulane University School of Architecture – New Orleans, LA, 1993

Teaching Experience:

- Coordinator, CAPSTONE Year, PCUPR School of Architecture (2015-present)
- Adjunct, Pontifical Catholic University of Puerto Rico's School of
- Summer Design Studio Teaching Assistant, Tulane University School of Architecture, 1993

Professional Experience:

- Architect, Arquitectura 3av CSP – Ponce, Puerto Rico, 2011-Present
- Architect, Luis Ayala Rubio Arquitecto – Ponce, Puerto Rico, 1994-Present
- Architect In Training, Virgilio Monsanto & Associates – Ponce, Puerto Rico, 1994
- Intern, Architectural Devices – New Orleans, LA, 1993-1994
- Intern, José Ramírez, AIA – San Juan, Puerto Rico, 1991

Licenses/Registration:

Puerto Rico Licensed No. 15033

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Luis V. Badillo-Lozano, AIA

Courses Taught:

ARAD 402 Contextual Design Studio II
ARAD 301 Experimental Design I: Building Technology and Sustainability
ARST 101 Tectonics on Material Applications and Methods

Educational Credentials:

- M.Arch., School of Architecture, University of Puerto Rico, 1983
- B.E.D., School of Architecture, University of Puerto Rico, 1981

Teaching Experience:

- IDP (NCARAB/AIA) Advisor, PCUPR School of Architecture, 2013
- Coordinator, ARST Experimental Unit, PCUPR School of Architecture, 2009-2015
- Adjunct, School of Architecture, Pontifical Catholic University of Puerto Rico
- Associate Professor, School of Architecture, Polytechnic Univ. of Puerto Rico

Professional Experience:

- Dean, School of Architecture, Pontifical Catholic University of Puerto Rico. 2015-present
- Principal, MÉNDEZ BRUNNER BADILLO ARCHITECTS & ENGINEERS, 1991- up to present
- Associate architect of "Mendez, Brunner & Assoc.", 1986-1990
- Associate architect of "Cividanes-Freiria & Assoc.", 1983-1986

Licenses/Registration:

Puerto Rico Licensed #10135
AIA #30076888

Selected Publications and Recent Research:

March, 2015 – *"Santa Maria Reina Church"*
February 14, 2015 – *"Chained to a Coconut Tree / The Saga of a no-no Country"*
October 25, 2015 – *"Enough"*
August 2, 2014- *"Stuck in Modernism/The need for a new thinking"*
May 17, 2014 – *"The Crisis, the Architect and the Re-Invention"*
September 17, 2011 - *"About Buildings and Architects"*
March 20, 2010 - *"One Ordinary Morning"*
December 19, 2009 - *"A Few Hours in Lavender"*
November 7, 2009 - *"Heavenly Shells"*
September 19, 2009 - *"The Friendly Ghost"*
August 29, 2009 - *"I Already Have My Little House"*
August 1, 2009 - *"La Rada Hotel/ Gone With the Wind"*
August 27, 2009 - *"Ponce Intercontinental / and Tropical Modernism"*
October 16, 2004 - *"For a More Cohesive City"* and on the same issue different Section
October 16, 2004 - *"Yesterday my Grandmother Turned 100"*

March 21, 2004 - *"Roosevelt Roads Naval Base/ an Urban Opportunity"*

Professional Membership:

Designated Member of the CAAPPR "Professional Ethics Commission", 2012

AIA Representative of the NAAB Visiting Team, 2005-2010

Designated Member of the CAAPPR "Educational Committee", 2008

Co-Chairman of the AIA Florida "Caribbean Basin Initiative", 1998

President, AIA Puerto Rico Chapter, 1994

Vicepresident, AIA Puerto Rico Chapter, 1993

Treasurer, AIA Puerto Rico Chapter, 1992

National Trust for Historic Preservation

Name: Luis A. Camaño-Rivera

Courses Taught:

ARAR 101 Diagramming and Representation Techniques
ARAR 102 Diagramming and Representation Techniques
ARAD 101 Architectural Design Fundamental 1
ARAD 102 Architecture Design Fundamentals 2
ARAD 302 Experimental Design Studio 2
ARAD 401 Contextual Design Studio 1
ARAR 401 Scripting and Procedural Morphology
ARAR 402 Territorial Urban and Infrastructure Analysis

Educational Credentials:

- B.Arch., SCI-Arc (Southern California Institute of Architecture), 2004
- SCI-ARC studies abroad program, i2A instituto internazionale di architettura, Switzerland

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico, 2009-2015
- Adjunct, International School of Design and Architecture, Turabo University of Puerto Rico (2013)

Professional Experience:

- Principal, Relatividad Diseño PSC (San Juan Puerto Rico) 2014-present
- Design Consultant (San Juan, Puerto Rico) 2012-present
- Project Architect, Bonnín Orozco Arquitectos (Ponce, Puerto Rico) 2004-2012
- Intern, Studio Jakob + MacFarlane (Paris, France) 2004
- Architect Assistant, San Juan Urban Department (San Juan, Puerto Rico) 1998-2002

Selected Publications and Recent Research:

- Concrete Jungle/ Concrete Forming Systems (work in progress in concrete assembly technology)
- Parque del Litoral Waterfront (Lecture at Planning Society of Puerto Rico) 2012
- Waterfront: Malecón de Naguabo (“Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico”, CAAPPR) 2014
- PR Design Network (digital platform)

Licenses/Registration:

Puerto Rico Licensed #19927

Professional Memberships:

“Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico” (CAAPPR)

Name: Luis Ramos-Lorenzo

Courses Taught:

ARAR 101 Diagramming and Representation Techniques
ARAR 102 Non-linear Diagramming and Complex Geometry
ARAR 301 Parametric Modeling
ARAR 302 Parametric Detailing

Educational Credentials:

- M.Arch., University of Illinois at Urbana-Champaign, 2006-2008
- B.S.A.S., University of Wisconsin-Milwaukee, 2003-2005

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture
- Teaching Assistant, Interamerican University of Puerto Rico

Professional Experience:

- 3D Modeler/BIM Consultant, Arqrender Corporation (Aguada, PR) 2011-Present
- Designer/BIM Consultant, Mario Montilla Arquitectos (San Juan, PR) 2011
- Designer/BIM Consultant, OVA Architects, Engineers & Planners (Hatillo, PR) 2010
- Project Designer, Carlos J. Ralat Arquitectos (Mayaguez, PR) 2009-2010
- Intern - Albion Group Architects (Milwaukee, WI) 2005

Licenses/Registration:

Puerto Rico Registered

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Luz M. Rodríguez-López

Courses Taught:

ARAD 410 Developmental Design Studio I: Legal and Administrative Awareness
ARHT 301 Architectural History III: Latin America and Puerto Rico
ARHT 201 Architectural History II: Baroque to Contemporary Architecture

Educational Credentials:

- Ph.D., Polytechnic University of Catalonia, Barcelona, 2004-2008
- M.S. Arch., Mississippi State University, 1992-1994
- B.E.D., University of Puerto Rico, Río Piedras, 1986-1991

Teaching Experience:

- Researchers Coordinator, Pontifical Catholic University of Puerto Rico's School of Architecture, 2015-
- Assistant Professor, Pontifical Catholic University of Puerto Rico's School of Architecture, 2013-
- Adjunct, University of Puerto Rico's School of Architecture
- Adjunct, University of Puerto Rico's Graduate School of Information Sciences

Professional Experience:

- Interim Dean, PCUPR School of Architecture (Ponce) Sept 2014- March 2015
- Assistant Professor, PCUPR School of Architecture (Ponce) 2012-Present
- Associate Dean, PCUPR School of Architecture (Ponce) 2012-2014
- Archivist/Researcher, Architecture and Construction Archives at the UPR - 1997-2012

Selected Publications and Recent Research:

- "Being for [an]Other: The Caribe Hilton or Ambivalence as Presence in a United States' Colony" in Soumyen Bandyopadhyay and Guillermo Garma-Montiel, eds. *The Territories of Identity: Architecture in the Age of Evolving Globalization* (London: Routledge, 2013) 169- 179.
- "Crono-breviario de un dilema inconcluso de la vivienda asequible," / "Chrono-breviary of an Incomplete Dilemma in Public Housing," *Entorno: Revista del Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico*, 21, year 7, vol. 2, (2012) 13-18.
- Book Review for *Designing Pan-America: US Architectural Visions of the Western Hemisphere*, Robert Alexander González, Austin, University of Texas Press, 2011. In *Planning Perspectives*, vol. 27, no. 1 (January 2012): 155-156.

Professional Memberships:

Society of Architectural Historians
Latin American Studies Association
Architectural Humanities Research Association
Puerto Rico Archives Network

Name: Magda Bardina-García

Courses Taught:

ARAD 201 Analytical Design Studio I
ARAD 202 Analytical Design Studio II
ARAC 101 Fundamentals of Historic Preservation and Conservation
ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems
ARAC 301 Conservation Planning Strategies and Policies

Educational Credentials:

- M.Arch., University of Puerto Rico, Rio Piedras, P.R. 1989
- Participant-UNESCO Workshop and Course on Monument Techniques: Roofing, Carpentry and Masonry, National University of Haiti 1984
- B.E.D., School of Architecture, University of Puerto Rico, 1983
- Participant - Preservation Institute of the Caribbean, University of Florida/ Interamerican University, San German, Puerto Rico, 1983

Teaching Experience:

- Adjunct, School of Architecture, Pontifical Catholic University of Ponce, P.R.,
- Coordinator, ARAC Experimental Unit, PCUPR School of Architecture, 2009-present

Professional Experience:

- President, Atelier 66 CSP, Ponce, Puerto Rico, 2003 - present
- Consultant, Urban Development Office, Municipality of San Juan 1999 - 2003
- Director, Historic District, Municipality of Ponce, Puerto Rico 1992 - 1998
- Director, Historic District, Puerto Rico Cultural Institute, Ponce, Puerto Rico 1990
- Consultant, Historic District, Puerto Rico Cultural Institute, Ponce, Puerto Rico 1988-1990
- Conservation Trust of Puerto Rico, San Juan, Puerto Rico 1986 - 1988
- Designer and Historic Preservation Consultant, Beatriz Del Cueto

Selected Publications and Recent Research:

- "Ponce Abre sus Puertas" Ponce, Puerto Rico 2014
- "Simposio: Hacia una Nueva Visión de la Preservación Histórica: Siglo XXI" Ponce, Puerto Rico 2012
- Investigation, Documentation & Assessment of Historic Value, Puerto Rico
- International Symposium on Conservation of Monuments Campeche, México
- International Symposium on Conservation of Monuments, Heritage and Tourism
- International Symposium on Conservation of Monuments 1991
- Lecture: The Revitalization of the historic center of Ponce: Reuniting with their natural environment

Licenses/Registration:

Puerto Rico Registered – AIT Certificate 1294

Name: María Escalona-Cruz

Courses Taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II
ARAR 301 Parametric Modeling
ARAR 401 Scripting and Procedural Morphology
ARAR 402 Territorial, Urban and Infrastructural Data Analysis
ARAR 410 Independent Research I
ARAR 420 Independent Research II

Educational Credentials:

- M. Arch., University of Illinois at Urbana-Champaign, 2012
- B.E.D., University of Puerto Rico, Rio Piedras, 2010

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2012-present
- Research Assistant, University of Illinois at Urbana-Champaign, 2011

Professional Experience:

- Intern Architect/Designer, ERERAS Arquitectos, PSC (San Juan, Puerto Rico) 2014-present
- Design Research/Intern Architect, n.formation studio (San Juan, Puerto Rico) 2013
- Intern, Otto Reyes Arquitectos, PSC (San Juan, Puerto Rico) 2007-2009

Selected Publications and Recent Research:

- Vertical Glaciers, Tectonic Landscapes: Thesis Project, University of Illinois at Urbana-Champaign. El Nuevo Día, Dec. 2014
- Infrastructure as Architecture, Syphoning Weirs. D3 Natural Systems International Architectural Competition, 2012
- Architecture & Death, Non-Denominational Burial Chapel. Revista Márgenes Arquitectura, Granada, Spain 2012

Licenses/Registration:

Puerto Rico Registered #20590

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
American Institute of Architects (AIA), Assoc. AIA 38315345

Name: Michelle Colón-Malavé

Course Taught:

ARAD 401 Contextual Design Studio I

ARLE 301 Ecological Principles in the Built Environment

Educational Credentials:

- M.L.A., Polytechnic University of Catalunya ETSAB, Barcelona, 2006-2008
- M.S. Architecture & Sustainability- Polytechnic University of Catalunya ETSAB, Barcelona, 2005-2006
- B.S. Architectural Studies - Polytechnic University of Puerto Rico 2001-2005 (degree not completed)
- B.S. Communications & Advertising, University of the Sacred Heart, Puerto Rico, 1996-2000

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture
- Instructor, Summer workshop Bosque Escuela La Olimpia, Adjuntas, Puerto Rico
- Instructor, Fundación por la Arquitectura (FxA) , Colegio de Arquitectos y Arquitectos Paisajista (CAAPPR). San Juan, Puerto Rico 2013-2014

Profesional Experience:

- Designer, MC Estudio de Arquitectura 2013-present
- Designer, Serie-S Design and Digital Fabrication Workshop. San Juan, Puerto Rico 2012
- Designer, Xavier Fábregas i Tomás Arquitectes. Barcelona, Spain, 2010
- Designer, Esteyco. Barcelona, Spain, 2010-2009
- Designer, Loles Herrero i Canela Architect and Urban planner. Barcelona, Spain, 2009
- Intern, Estudi:e. Barcelona, Spain, 2007-2009
- Intern, Espacio Estudio Arquitectura. Barcelona, Spain, 2006
- Permits Technician, Oficina Municipal de Permisos. San Juan, Puerto Rico 2004-2005

Selected Publications and Recent Research:

- Recognition of domestic interior courtyards in the historic district of Old San Juan S. XIX (Phase II), investigation and documentation collaboration for SHPO (2014)
- Recognition of domestic interior courtyards in the historic district of Old San Juan S. XIX (Phase II), documentation collaboration for SHPO (2014)
- Temps de Flors. Bosc i sotabosc, garden installation. Casa Pastors Girona, España

Profesional Membership:

American Institute of Architects

Name: Milimar Hernández-Muñiz

Courses Taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II

Educational Credentials:

- M.Arch., University of Illinois, Champaign-Urbana, 2006 - 2008
- B.S.A.S, University of Wisconsin, Milwaukee, 2001 - 2005

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2012-2013
- Instructor, Interamerican University of Puerto Rico, 2003-2004

Professional Experience:

- Regent for Student Affairs, PCUPR School of Architecture (Ponce, Puerto Rico) 2009-Present
- Documentation Consultant, Abbott Medical Optics (Añasco, Puerto Rico) 2008 - 2009
- Architect in Training, Añeses & Associates (Aguadilla, Puerto Rico) 2006

Licenses/Registration:

Puerto Rico Registered

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico [CAAPPR]

Name: Mónica Sánchez-Sepúlveda

Courses Taught:

ARAR 101 Diagramming and Representation Techniques
ARAD 201 Analytical Design Studio I
ARAD 401 Contextual Design Studio I
ARAD 402 Contextual Design Studio II
ARUS 301 Territorial Planning Strategies on Infrastructure and Communities

Educational Credentials:

- M.Arch. - University of Puerto Rico, 2009-2011
- B.E.D. - University of Puerto Rico, 2004-2009

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture 2013-Present
- Teaching Assistant, University of Puerto Rico, 2010-2011

Professional Experience:

- Project Manager, FEF Consultores, CSP (San Juan, Puerto Rico) 2013-Present
- Visiting Researcher, Pontifical Catholic University of Chile (Santiago, Chile) 2014
- Architectural Designer, Integra Architects & Engineers, PSC (San Juan, Puerto Rico) 2013-2014
- Architectural Intern, Bitsch Architekten & Partner (Berlin, Germany) 2011
- Architectural Intern, Oficina del Historiador (Havana, Cuba) 2010
- Interior Design Intern, ABCD Publishing, LLC (Sunnyvale, California) 2009-2010
- Design- Build Intern, Museum of Outdoors Arts (Denver, Colorado) 2008
- Architectural Intern, Talleres MA (San Juan, Puerto Rico) 2005-2006

Selected Publications and Recent Research:

- *Configuring types of public spaces as catalysts of citizenship: Tools of analysis and evaluation of urban networks for socio-spatial integration.* (submittal, 01.2015)
- *Entre la muralla colonial y la trujillista: Patrimonio arquitectónico y evocación histórica.* In Archivos de Arquitectura Antillana 053, 12.2014
- *Designing for Social Innovation and Leadership.* In UPEACE Center for Executive Education, 11.2015
- *Sustentabilidad: ¿Cultura o Capitalismo?* In Diálogo Digital, 08.13.2013
- *Comunidad y prácticas sustentables contemporáneas.* In Cruce 09.30.2013

Licenses/Registration:

Puerto Rico Registered - AIT Certificate #20629

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Pablo Planet-Arrocha, Ph.D.

Courses Taught:

ARHT 101 Architectural History I: Ancient to Renaissance

ARHT 201 Architecture History II: Baroque to Contemporary Western Civilization

ARHT 301 Architectural History III: Latin America and Puerto Rico

Educational Credentials:

- Ph.D., Universidad de Sevilla, España, 2000
- Ph.D.©, Universidad de Valladolid, España, 1991
- M.A., Centro de Estudios Avanzados de Puerto Rico y el Caribe, 1993
- B.A. & M.A., Universidad de Barcelona, 1977
- B.S., Universidad de Barcelona, 1972

Teaching Experience:

- Adjunct, Pontificia Universidad Católica de Puerto Rico, 2009-present
- Professor, Universidad Interamericana de Puerto Rico, 2006-present
- Adjunct, American University, 2005-2007
- Adjunct, Universidad de Puerto Rico, 2005-2007
- Adjunct, Caribbean University, 2001-present
- Adjunct, Universidad del Este, 2001-present
- Adjunct, Universidad del Turabo, 1987-2001

Professional Experience:

- President, Patrimonio y Ciudad, Inc., Puerto Rico 1991-present
- Project Architect, Municipio de Caguas, Puerto Rico, 1992-1997
- President, Proyectos Planet, Punto Fijo, Venezuela 1980-1982
- Engineer, Concimeca, C.A., Punto Fijo, Venezuela, 1980
- Project Architect, Despacho Arquitectura Planet, Barcelona & Valencia, España, 1977-1978

Selected Publications and Recent Research:

- *Catedral de Ponce: Arquitectura y Liturgia (2010)*
- La Revitalización Urbana del Viejo San Juan de Puerto Rico (2000)
- La Demografía de Caguas en el Siglo XIX (1999)
- La Revitalización del Centro urbano de Caguas (1993-1995)

Licenses/Registration:

Spain

Professional Memberships:

American Concrete Institute

Earthquake Engineering Research Institute

Sociedad de Administradores de Investigación de P.R.

Name: Pedro A. Rosario-Torres

Courses Taught:

ARAD 401 Contextual Design Studio I: Landscape, Ecology and Environment
ARAD 410 Developmental Design Studio I: Legal and Administrative Awareness
ARAR 202 Dynamic Imaging and Documentation
ARDA 101 Entrepreneurship on Developmental Politics
ARDA 301 Marketing and Branding through Commercial Communication Skills
ARHT 101 Architectural History I: Ancient to Renaissance

Educational Credentials:

- A.D. Civil Engineering Technology, Technological Institute of Puerto Rico, 1999
- B.Arch., Polytechnic University of Puerto Rico, 2010

Academic Experience:

- Special Projects Coordinator, School of Architecture, Pontifical Catholic University of Puerto Rico, 2010
- Baccalaureate Program Director, School of Architecture, Pontifical Catholic University of Puerto Rico, 2010-present
- Full Time Faculty, Pontifical Catholic University of Puerto Rico, 2010-present

Professional Experience:

- Designer, All Engineering Services Corporation, 2006-2007
- Designer, Supervisor and Consulting Editor, ANIMA, Inc., 2007-2009
- Consultant, Mislá Villalba PSC – Engineers, Architects, Planners and Developers, 2010-present

Selected Publications and Recent Research:

- Academic Curriculum for the PCUPR School of Architecture (PCUPR, 2008)
- Proposal for the PCUPR Bachelor in Architecture (CEPR, 2009)
- Substantive Change Request for the PCUPR School of Architecture (MSCHE, 2009)
- PCUPR School of Architecture Plan for Achieving Initial Accreditation (NAAB, 2009)
- PCUPR School of Architecture APR-IC (NAAB, 2010)
- Projects of New City Ecology: Threading a New Urban Ecosystem for International Productivity and Competitiveness (PCUPR School of Architecture, 2011)
- PCUPR School of Architecture APR-CC (NAAB, 2012)
- Curricular Approaches through Technological Access: Educational Homologation of Professional Experiences (CEEb, 2014)
- PCUPR Research Catalog 2013-2014 Academic Year (PCUPR, 2014)
- PCUPR School of Architecture APR-IA (NAAB, 2015)

Licenses/Registration:

Puerto Rico – 21776

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Pilarín Ferrer-Viscasillas

Courses Taught:

ARST 101 Tectonics on Material Applications and Methods
ARST 201 Introduction to Mechanical & Electrical Systems
ARAD 301 Experimental Design Studio I (co-teaching)

Educational Credentials:

- M.Arch., School of Architecture, University of Puerto Rico, 1988
- B.E.D., School of Architecture, University of Puerto Rico, 1985
- History of Art and Architecture - McGill University, Montreal, Canada 1979-1981 (non-degree)

Teaching Experience:

- Adjunct, School of Architecture, Pontifical Catholic University of Puerto Rico, 2010-present
- Coordinator, ARST Experimental Unit, PCUPR School of Architecture, 2015-

Professional Experience:

- Associate Architect, Mendez, Brunner, Badillo & Assoc., 1992- present
- Interior Designer, Simon Drury Ltd., 1988-1992

Selected Publications and Recent Research:

- *Recent research on Historic Cemeteries in Puerto Rico and Funerary symbolism representations in tombs and mausoleums* to be published in *Ambiente y Color* (local magazine published by **SHIPO**)

Licenses/Registration:

Puerto Rico License No. 10476
AIA Member No. 30136499

Professional Memberships:

President, Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico, 2013-present
American Institute of Architects
AIA National Committee on Diversity
Vice President, Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico, 2012-2013
Vice President, Federation of Caribbean Architects Associations 2010-2012
President, American Institute of Architects (P.R. Chapter), 2006
Director, American Institute of Architects (P.R. Chapter), 2003 & 2004

Name: Raúl Rivera-Ortiz, AIA, NCARB

Courses Taught:

ARAD 101 Fundamental Design Studio I

ARAD 301 Experimental Design Studio I: Structural Framework and Assemblages

Educational Credentials:

- B. Arch, Cornell University School of Architecture, Art and Planning (Ithaca, NY) 1976
- Delft Institute of Technology (Delft, Netherlands) summer 1976
- ETH (Zurich, Switzerland) summer 1975

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico School of Architecture, 2011-2014

Professional Experience:

- President, Rivera & Lastra Architects, PSC - San Juan, Puerto Rico, 2004-2011
- Owner, RRO Architects – San Juan, Puerto Rico, 1978-2004
- Architect in Training, WMR Architects – Guaynabo, Puerto Rico, 1976-1978

Selected Publications:

- Arq-I-Tec Magazine, “Regulando la Práctica de la Arquitectura”, August 2010
- Ambiente y Color Magazine, “El Arquitecto y su Preparación”, July 2010
- Arq-I-Tec Magazine, “Requisitos para la Licenciatura: Educación, Examen, Experiencia”, April 2010
- Arq-I-Tec Magazine, “Requisitos para la Práctica Profesional: Las 5 E’s”, November 2009

Licenses/Registration:

Puerto Rico License No. 8113

Professional Memberships:

College of Architects and Landscape Architects of Puerto Rico (CAAPPR)

American Institute of Architects (AIA)

Academy of Architecture for Health (AAH)

National Trust for Historic Preservation (NTHP)

United States Green Building Council (USGBC)

Professional Leadership Positions:

PR Architects and Landscape Architects Board of Examiners, President, 2008-2013, 2014-present

NCARB Continuing Education Committee, Member, 2010 – 2011; Chair, 2012 – Present

NCARB NAAB Visiting Team Pool Member, 2010 – Present

AIA Puerto Rico, President, 2002

Name: Ricardo Miranda-Pérez

Courses Taught:

ARAR 101 Architectural Representation, Diagraming and Representation Techniques
ARAR 102 Architectural Representation, Non-Linear Diagraming and Complex Geometry
ARAR 201 History and Theory, Historical Documentation and Representation Techniques
ARAR 202 History and Theory, Historical Dynamics Imaging and Documentation
ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems
ENSC 630 Environmental Planning, College of Science- Department of Biology, PUCPR

Educational Credentials:

- M.Arch, University of Puerto Rico, Rio Piedras, 1993-1996
- B.E.D., University of Puerto Rico, Rio Piedras, 1985-1991

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2009-

Professional Experience:

- FabLab Machine Operator, PCUPR School of Architecture (Ponce, Puerto Rico) 2013-Present
- Junior Designer, Atelier 66 CSP (Ponce, PR) 2002-2010
- Director, Home Rehabilitation in its Place Program, City of Ponce 1994 -2002
- Restoration Workshop Instructor/Coordinator, Escuela-Taller Program, ICP, SHPO 1991-1994

Selected Publications and Recent Research:

- *Bike Share Feasibility Study*, City of Ponce, Collaborator, Jan 2015
- *Conceptual Design of On-Street Bicycle Routes in Ponce, PR*, Collaborator, Dic 2014
- *"Housing Rehabilitation, la Playa de Ponce"* Florida/Caribbean Architect Magazine, AIA Florida Mar 2002

Licenses/Registration:

Puerto Rico Registered #16054

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Roberto García-Soto

Courses Taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II
ARAD 201 Analytical Design Studio I: Architectural History and Theory
ARAD 202 Analytical Design Studio II: Adaptive Conservation and Preservation
ARAC 201 Preservation Techniques, Methods and Strategies for Building Systems
ARAC 430 Origin, Handling, Performance and Application of Lime in Buildings, Colombia

Educational Credentials:

- M.Arch.,. University of Puerto Rico, Rio Piedras, P.R. 1989
- Participant - UNESCO Workshop Techniques: Roofing, Carpentry and Masonry. National University of Haiti 1984
- B.E.D.. School of Architecture, University of Puerto Rico, Rio Piedras 1983
- Participant - Preservation Institute of the Caribbean. University of Florida, 1983

Teaching experience:

- Adjunct, School of Architecture, Pontifical Catholic University of Ponce, P.R., 2009 - present
- Instructor, School of Architecture. Politechnical University of Puerto Rico, 1998 & 2009

Professional experience:

- Design & Historic Preservation Consultant, Atelier66 csp 2001- present
- President , Anastylos Inc. 2000-2001
- Historic Preservation Consultant, Antiguo Edificio de Agricultura, UPR Mayagüez 2000-2001
- Architecture and Historic Preservation Consultant, Ing. Axel Bonilla, Ponce, P.R. 1995
- Project Manager and Historic Preservation Consultant, ESCO Group. 1991-1995
- Project Manager for Historic Properties, Conservation Trust of Puerto Rico 1989
- Designer. Beatriz del Cueto Architects & Historic Preservation Consultants. Guaynabo, P.R. 1988

Publications and Research

- *"Ponce Abre sus Puertas"* Ponce, Puerto Rico 2014
- *"Simposio: Hacia una Nueva Visión de la Preservación Histórica: Siglo XXI"* Ponce, Puerto Rico 2012
- La Tierra desde el Cielo "Behavior of Patterns" May 2011
- Movement architecture and Cinemas – "El Teatro Rex de Ponce" May 2011

Licenses/Registration:

Puerto Rico Registered – AIT Certificate 13098

Name: Tamara Orozco-Rebozo

Courses Taught:

ARAD 101 Fundamental Design Studio I
ARAD 102 Fundamental Design Studio II
ARAD 401 Contextual Design Studio I
ARLE 101 Built Environment and Culture in the History of Landscape Architecture
ARLE 201 Environment Construction Processes, Materials and Techniques

Educational Credentials:

- B.L.A., Landscape Architecture Bachelor Degree, Louisiana State University, 2001)

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture 2009-Present
- Coordinator, ARLE Experimental Unit, PCUPR School of Architecture, 2009-present

Professional Experience:

- Designer and Project Manager, recurso:CIUDAD, Design-Build Studio (San Juan, Puerto Rico) 2012-present
- President - Institute of Landscape Architects (San Juan Puerto Rico) 2012-2014
- Planning and Capital Investment Project Manager and Consultant - Adaptable Paths (San Juan, Puerto Rico) 2009-2013
- Planning and Capital Investment Project Consultant, University of Puerto Rico (Bayamón, Puerto Rico) 2007-2009
- Capital Investment Project Manager, University of Puerto Rico Central Administration (San Juan, Puerto Rico) 2004-2007
- Associate Landscape Architect/Designer, JADT Landscape Architecture (San Juan, Puerto Rico) 2001-2003
- Head of Landscape Design Department, Gramaslindas (San Juan, Puerto Rico) 2001-2003
- Landscape Architecture Intern, PL Design Planning and Landscape Architecture (Bangkok, Thailand) 2000

Selected Publications and Recent Research:

Agrotouristic Route 123 – PCUPR School of Architecture

Licenses/Registration:

Puerto Rico Registered Landscape Architect #32

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
Instituto de Arquitectos Paisajistas de Puerto Rico (IAPPR)

Name: Wilfredo Adorno-Pomales

Courses Taught:

ARAR 101 Diagramming and Representative Techniques
ARAR 102 Non-linear Diagramming and Complex Geometry
ARAR 201 Historical Documentation and Representation Techniques
ARAR 410 Independent Research I

Educational Credentials:

- B. Arch, Polytechnic University of Puerto Rico, 2011

Teaching Experience:

- Instructor, University of Puerto Rico – Rio Piedras, 2012-Present
- Adjunct, Pontifical Catholic University of Puerto Rico's School of Architecture, 2011-Present
- Instructor, "Now What? Digital Seminars" Polytechnic University of Puerto Rico, School of Architecture, 2009

Professional Experience:

- Partner, Adorno Architect (San Juan, Puerto Rico) 2014-Present
- Assistant, Adorno's Art Design (San Juan, Puerto Rico) 2008-2014
- Assistant, Miguel Calzada Architect (San Juan, Puerto Rico) 2005
- Assistant, Jorge Rigau Architect (San Juan, Puerto Rico) 2004

Selected Publications and Recent Research:

- Arquillano, Web page, <http://arquillano.com/2010/10/26/premios-de-honor-2010-aia-capitulo-de-puerto-rico>, 2010
- "Architecture icons base their status on more than just history" in: Rigau, Jorge. Editor. *A quien investiga temas en torno devenir arquitectónico y urbano del caribe particularmente sobre Puerto Rico, Índice Anotador*. Universidad Politécnica, San Juan, 2009.
- Charrette Roosevelt Roads Urban Planning, Publication in *Entorno* vol 2. 2009
- Charrette Environmentally Friendly Housing, publication in *El Nuevo Día*, September 27, 2008, p.52

Licenses/Registration:

Puerto Rico Registered - AIT Certificate 20479

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)
American Institute of Architects (AIA), Assoc. AIA Certificate 38415628

Name: Wilfredo Méndez-Vázquez

Courses Taught:

ARAD 101 Architectural Design Fundamentals I
ARAD 102 Architectural Design Fundamentals II
ARAD 202 Analytical Design Studio II
ARAD 302 Experimental Design Studio II
ARAD 401 Contextual Design Studio I
ARSF 101 Architectural Structures I: Statics and Strength

Educational Credentials:

- M.Arch., University of Puerto Rico, 2010
- B.E.D., University of Puerto Rico, 2008

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico, 2012-present
- Teaching Assistant, Rural Studio of the University of Puerto Rico, 2009-2010

Professional Experience:

- Architect in Training, Jose Soto Engineers & Assoc. (Guayama, Puerto Rico) 2012-present
- Architect in Training, Ramírez-Gonzalez Studio (Caguas, Puerto Rico) 2011-2012
- Intern, Fuster and Partners Architects (Rio Piedras, Puerto Rico) 2007-2009

Selected Publications and Recent Research:

- Seismic-Resilient Synthetic Bones, (FX Design Magazine, 2014)
- Nature 2.0: Between the Future and a New Tectonic Dimension, (Polimorfo Magazine Vol.3, 2014)
- The Next Nature of Concrete, (archi-ninja.com, 2014)
- Un-Natural Concrete, (thinking-in-practice.com, 2013)
- Biologically-Inspired Concrete Bones, (TOS - University of Puerto Rico, 2013)
- Structuring Biomimicry, Improving Building's Resiliency, (NextNature Network, 2012)
- Biotechnology Improving Building's Earthquake Resistance, (About.com Construction, 2012)

Licenses/Registration:

Puerto Rico Registered - AIT Certificate 20436

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Name: Yesenia Rodríguez González

Courses Taught:

ARLE 101 Built Environment and Culture in the History of Landscape Architecture

Educational Credentials:

- M.L.A., Polytechnic University of Puerto Rico School of Architecture, 2011
- M.Arch., University of Puerto Rico School of Architecture, 2001
- B.E.D, University of Puerto Rico School of Architecture, 1997

Teaching Experience:

- Adjunct, Pontifical Catholic University of Puerto Rico, 2012-present

Professional Experience:

- Secretary, Institute of Landscape Architects of Puerto Rico, San Juan, PR 2012-present
- Education Coordinator, CAAPPR, Santurce, PR 2011-2014
- Office Operations Supervisor, Administration, Census 2010, US Census Bureau 2009-2010
- Designer, CRB Caribe, LLP - Engineers & Architects 2008
- Project Coordinator/Space Planner, AMGEN, Space Planning & Site Engineering Divisions, Juncos, PR 2007-2008
- Designer, JRC Engineers, San Juan, PR 2006-2007
- Designer, Acevedo & Fuster Architects PSC, San Juan, PR 2003-2006
- Planning Technician, Urbanism Department, Municipality of San Juan 2001-2003

Selected Publications and Recent Research:

- The multispatial landscape in the suburban avenue , Thesis Research

Licenses/Registration:

LAIT Certification, Colegio de Arquitectos y Arquitectos Paisajistas, Puerto Rico

AIT Certification, Colegio de Arquitectos y Arquitectos Paisajistas, Puerto Rico

Professional Memberships:

Colegio de Arquitectos y Arquitectos Paisajistas de Puerto Rico (CAAPPR)

Instituto de Arquitectos Paisajistas de Puerto Rico

IV.4. VISITING TEAM REPORT (2013 VTR-CC)

National Architectural Accrediting Board, Inc.

August 5, 2013

Dr. Jorge Iván Vélez Arocho
President
Pontificia Universidad Católica de Puerto Rico
PO Box 7186
Ponce, Puerto Rico
00732

Oficina del Presidente
Trámite de Correspondencia
RECIBIDA EN

AUG 28 2013 1:55pm

Referencia a
Copia a
Archivada
Dr. L. C. C.



Dear Dr. Vélez Arocho:

At the July 2013 meeting of the National Architectural Accrediting Board (NAAB), the board reviewed the *Visiting Team Report* (VTR) for the Pontificia Universidad Católica de Puerto Rico School of Architecture.

As a result, the professional architecture program: **Bachelor of Architecture** was formally granted continuation of its candidacy for a period of not less than two years. The continued candidacy term is effective January 1, 2013. Initial accreditation must be achieved by 2017, or the program will be required to submit a new candidacy application.

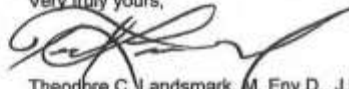
Continuing candidacy is subject to the submission of *Annual Statistical Reports* and any subsequent visits that may be required until initial accreditation is achieved.

The Annual Statistical Report is described in Section 10, of the *NAAB Procedures for Accreditation*, 2012 Edition, **Amended**. This report captures statistical information on the institution and the candidate program.

Finally, under the terms of the *2012 Procedures for Accreditation*, programs are required to make the *Architecture Program Report*, the VTR, and related documents available to the public. Please see Section 4, paragraph j. (page 43), for additional information.

The visiting team has asked me to express its appreciation for your gracious hospitality.

Very truly yours,



Theodore C. Landsmark, M. Env.D., J.D., DFA (Hon.), Ph.D.
President

cc: Javier DeJesus Martinez, Dean
Christine Theodoropoulos, Visiting Team Chair
Visiting Team Members

Enc.

1101 Connecticut Avenue, NW
Suite 410
Washington, DC 20006

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info@naab.org

**Pontificia Universidad Católica de Puerto Rico
School of Architecture**

Continuation of Candidacy Visiting Team Report

B. Arch (192 semester credit hours)

The National Architectural Accrediting Board
27 March 2013

The National Architectural Accrediting Board (NAAB), established in 1940, is the sole agency authorized to accredit U.S. professional degree programs in architecture. Because most state registration boards in the United States require any applicant for licensure to have graduated from a NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture.

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I. Summary of Team Findings

1. Team Comments & Visit Summary

Visit Summary:

We thank the school and the university for their hospitality and assistance throughout the visit.

We also thank those who helped us by translating conversations and documents. The Pontificia Universidad Católica de Puerto Rico (PUCPR) is a bilingual community. The School of Architecture's internal communications and instruction are primarily in Spanish. There was sufficient English documentation and explanations provided during the visit for us to have high confidence that we were able to fully assess all NAAB Conditions that do not pertain to student performance criteria. We believe that we were able to adequately assess student performance where evidence was primarily graphic and where much of the content in Spanish was clear to our team.

Team Comments:

- PUCPR's School of Architecture nurtures a close-knit community of energetic faculty and students dedicated to discovery. It is a healthy community whose members are respectful and supportive of one another.
- The school has embraced the community and the community has embraced the school. Many good things come of this relationship. Located in a unique, historic storefront building in Ponce's city center, the school attracts public interest in the program and in architecture, and increases the presence of the university within the community. A passionate culture of civic engagement involves students in community service, integrates community service into the school's curriculum, and furthers understanding of the importance of architecture and role of architects in the public realm.
- The program's clearly designed curriculum presents a broad perspective of the discipline of architecture and the role of the architect as much more than a builder. The program's nine Experimental Units, which link studio and subject area courses, are taught sequentially to form a framework for the acquisition of core knowledge and abilities. Some of the experimental unit subjects, such as entrepreneurship and conservation, receive more attention at PUCPR than is typical in undergraduate architecture programs. This inclusive approach to the discipline of architecture helps students understand the diversity of career opportunities available to them. In addition, each experimental unit offers elective courses that can be applied to a minor overseen by that unit.
- Teaching of design process technologies efficiently and early in the curriculum supports a steep learning curve in the area of architectural representation. Students enjoy an uncommonly high level of computing resources with hardware and software provided by the school.
- With its location in the Caribbean, its bilingual culture, and regional Puerto Rican identity, the school is in a unique position to provide national leadership in architectural education as a bridge for international and multicultural engagement.
- All of these qualities contribute to the school's emergence as a new and exciting "catalyst for opportunity."
- ✓ • Incomplete or inconsistent evidence and explanations in the APR and team room appears to be a result of being new to the accreditation process and not fully aware of the definitions of the NAAB

Conditions and evidence expectations. Some of the material submitted needed proof reading. Missing exhibit labels and labeling that was inconsistent with the SPC Matrix made it difficult to locate information or understand curricular intent. We did not have access to all of the course materials provided to students, such as assignment descriptions or course schedules, nor did we see complete documentation of all assignments in required courses. Some exhibits of student work did not include low pass examples.

2. Conditions Not Yet Met

II.4.1 Statement on NAAB Accredited Degrees

Student Performance Criteria:

- A.9 Historical Traditions and Global Culture
- B.1 Pre-Design
- B.2 Accessibility
- B.5 Life Safety
- B.6 Comprehensive Design
- B.7 Financial Considerations
- B.9 Structural Systems
- B.10 Building Envelope Systems
- C.3 Client Role in Architecture
- C.4 Project Management in Architecture
- C.5 Practice Management
- C.6 Leadership
- C.8 Ethics and Professional Judgment

3. Causes of Concern

1. Impact of the high number of credits on program cost and time to graduation

At 192 semester credits, this 5-year program, offered over 10 academic year semesters and two summer semesters, requires more credits than any NAAB-accredited B.Arch. program offered on a semester calendar and significantly exceeds the 168 credits NAAB requires for the Master of Architecture degree. The average number of credits students are expected to complete per year (38.4) also appears to be significantly higher than other programs at the university. The curriculum plan shows typical course loads of 18 or 19 credits per semester making it difficult for students to complete the program on time or afford its cost. Students who want to complete the program at a less intensive pace face scheduling and sequencing difficulties that can add further to the cost and time it will take them to complete the degree.

✓ 2. Physical separation and scheduling differences between the school and main campus

As an off-campus, independent enterprise, the school may be becoming somewhat insular. The lack of coordination with the main campus is compromising student access to university courses, activities and services.

3. Lack of full-time or ongoing faculty positions

The school currently has only one full time faculty member. Over 40 part-time instructors are hired semester to semester. In cases when appointments are made on short notice, some instructors may not have sufficient lead-time to prepare their courses. The lack of ongoing faculty positions or positions that support the presence of faculty in residence at the school, may also make it difficult to oversee the continuous improvement of a new and evolving curriculum.

4. The school does not clearly articulate how knowledge and skills introduced by each experimental unit will be reinforced in later studies.

The curriculum is designed so that each subsequent experimental unit emphasizes new domains of architectural practice and knowledge. There is concern, based on student performance in some of the Realm B criteria, such as accessibility, life safety and structures, that those students who have not yet fully attained the level of understanding or ability expected, may not receive adequate opportunity for additional instruction that would help them progress in subsequent courses and studios. Since our assessment was based on student work in courses completed to date, rather than the full curriculum, we relied on course descriptions to understand the school's intentions for the final three semesters of study. Although the new knowledge objectives for the 4th and 5th years were clear, the school's objectives concerning the reinforcement of lessons introduced earlier in the curriculum were not. Without this information, it was difficult to understand how the school plans to meet the comprehensive design criterion.

5. The nine proposed minors, as planned, may pose some challenges for students who wish to access them. Upper division students need more clarity about how they can plan to meet the requirements for any minor they choose. There is concern that logistical constraints such as scheduling and course availability, may take precedence over subject area interest in student decisions.

6. Lack of source citations in work submitted by students

The team room included examples of work submitted by students presenting material copied directly from books and other sources without crediting the work of the author, designer or collaborator. This is an ethical issue and a professional responsibility.

4. Progress Since the Previous Site Visit (2011)

2009 Condition I.2.2. Governance: The program must demonstrate that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance.

Previous Team Report (2011): At this time in the School's development, governance opportunities for faculty and students are not yet in evidence. However, discussions with Administration, students and faculty indicate that these opportunities are currently under development. While the Experimental Unit Directors are involved in the development of School curriculum, they are not currently included in the administrative governance of the School. Likewise, the emerging Student government body has not yet been formalized as participatory to the governance structure of the School. The School is encouraged to continue to evolve ways in which faculty and students can participate in, and contribute to the administrative decision-making of the School through participation in committees, and other meaningful forms of School governance.

2013 Team Assessment: This condition is now met. See section I.2.2 of this report.

2009 Part II. Section I, Student Performance –Educational Realms & Student Performance Criteria (2011):

Previous Team Report (2011): All SPC's are Not Yet Met.

2013 Team Assessment: 13 of the 32 SPCs are Not Yet Met. See section II.1.1 of this report.

II. Compliance with the Conditions for Accreditation

Part One (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

Part One (I): Section 1. Identity and Self-Assessment

[X] The program has fulfilled this requirement for narrative and evidence

The program has described its history, mission and culture and positioned its identity within the history, mission and culture of the institution.

The new Bachelor of Architecture program is in its eighth semester, with its first cohort nearing their final year of the curriculum. The program aspires to become both an integral part of the Ponce community, and an academic link between the Caribbean and Latin America, and the United States. Further, the opportunity availed by establishing a new program in the twenty-first century allows the program to expand the scope of architectural education in ways that provide interdisciplinary opportunities to address contemporary challenges.

Informed by the university's Catholic values of service and dialogue, the program strives to integrate with the city of Ponce and beyond. The Fortaleza Building acts as a new anchor to the struggling downtown area of Ponce, while the curriculum serves as a means to provide design solutions to community challenges. The program contributes to the regional communities and students, through its engagement with multiple local agencies and industry partners, offering practical yet innovative solutions to real problems of urban growth and regeneration. To accomplish this ambition, the program draws upon the knowledge of disciplines usually found at the periphery of architectural education and makes them more central to the educational experience of the student.

The architecture program is highly regarded by the university as an incubator for service, design and interdisciplinary collaboration.

1.1.2 Learning Culture and Social Equity:

- *Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments both traditional and non-traditional.*

Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.

Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community: faculty, staff, and students are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.

- *Social Equity: The accredited degree program must provide faculty, students, and staff—irrespective of race, ethnicity, creed, national origin, gender, age, physical ability, or sexual orientation—with a culturally rich educational environment in which each person is equitably able to learn, teach, and work. This includes provisions for students with mobility or learning disabilities. The program must have a clear policy on diversity that is communicated to current and prospective faculty, students, and staff and that is reflected in the distribution of the program's human, physical, and financial resources. Finally, the program must demonstrate that it*

has a plan in place to maintain or increase the diversity of its faculty, staff, and students when compared with diversity of the institution during the term of the next two accreditation cycles.

[X] The program has demonstrated that it provides a positive and respectful learning environment.

[X] The program has demonstrated that it provides a culturally rich environment in which in each person is equitably able to learn, teach, and work.

2013 Team Assessment: Learning Culture: The school nurtures an environment of respect and camaraderie. All members of the community take pride in their program's accomplishments, and uniqueness relative to the university and the discipline of architecture. An artifact of this self-esteem is the student-designed t-shirt featuring the Fortaleza Building, the program's home and symbol of the school's community.

An official learning culture document written by students was adopted by the administration. While this document is included in the school's catalog, many current students are unfamiliar with its content. Despite being somewhat forgotten, the ten values codified in the document—respect; dignity towards work; prudence; solidarity; leadership and social commitment; equality; tolerance toward differences and participatory governing; promotion and dissemination; stimulating the creative process and cultivating the imagination; and cooperation and collaboration—continue to live on strongly within the school.

Students have high regard for their teachers, as do the faculty for the students. Faculty members are available for advising and mentorship, and take pride in students' curricular and extra-curricular accomplishments. Informal peer-to-peer support and mentorship among students is commonplace.

Social Equity: The demographic statistics of the school reflect that of Puerto Rico, and of the Ponce region. The environment is clearly one where each person is equitably able to learn, teach and work. We observed accommodations for students with disabilities that enabled individuals to equitably participate in the program.

1.1.3 Response to the Five Perspectives: *Programs must demonstrate through narrative and artifacts, how they respond to the following perspectives on architecture education. Each program is expected to address these perspectives consistently within the context of its history, mission, and culture and to further identify as part of its long-range planning activities how these perspectives will continue to be addressed in the future.*

A. Architectural Education and the Academic Community. That the faculty, staff, and students in the accredited degree program make unique contributions to the institution in the areas of scholarship, community engagement, service, and teaching.¹ In addition, the program must describe its commitment to the holistic, practical and liberal arts-based education of architects and to providing opportunities for all members of the learning community to engage in the development of new knowledge.

[X] The program is responsive to this perspective.

2013 Team Assessment: The curricular approach of the school is both *interdisciplinary* and *trans-disciplinary*.

¹ See Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*, Carnegie Foundation for the Advancement of Teaching, 1990.

Students are involved in numerous outreach projects through collaborations with non-profit groups to support social and environmental action. These include the Route 123 Agro-Tourism and Limbs for Haiti projects.

The nine Experimental Units expose students to a collaborative process that progressively integrates the fundamentals of design through the architectural design studios (i.e., the five-year ARAD course sequence). The other eight are the Architectural Representation lab sequence (ARAR), Architectural History & Theory (ARHT), Adaptive Conservation and Preservation (ARAC), Sustainable Technologies (ARST), Structural Frameworks and Assemblages (ARSF), Landscape, Ecology and Environment (ARLE), Urban Scapes and Communities (ARUS), Legal & Administrative Awareness (ARLA) and Development Assessment and Entrepreneurship (ARDA). This approach provides academic emphasis on architectural subjects and offers all students a *trans-disciplinary* opportunity for in-depth study through a minor concentration. Other PUCPR departments teach elective courses that fulfill minor requirements. For example, the History Department offers courses that fulfill the Architectural History & Theory minor and the Environmental Sciences Department offers courses that fulfill the Sustainable Technologies minor. The school's relationships with Louisiana State University, the State University of New York (SUNY) at Syracuse University enable PUCPR architecture students to be considered for advanced placement in landscape architecture programs at those institutions.

- B. Architectural Education and Students.** That students enrolled in the accredited degree program are prepared: to live and work in a global world where diversity, distinctiveness, self-worth, and dignity are nurtured and respected; to emerge as leaders in the academic setting and the profession; to understand the breadth of professional opportunities; to make thoughtful, deliberate, informed choices and; to develop the habit of lifelong learning.

[X] The program is responsive to this perspective.

2013 Team Assessment: The program prepares students to work in the global world by providing leadership and entrepreneurial opportunities. By exposing students to three stages of leadership: exploration, experimentation and application, both within and without the curriculum, the school provides skills and experience that develops successful leaders. The student-led AIAS and MAS (Movimiento de Arquitectura Social) organizations engage in community service, pre-professional development, and networking that benefit students, the school and the greater Ponce community.

The MAS is dedicated to awakening the community to the possibilities and benefits of architecture in the broadest sense. To introduce the school to the community the MAS provides an ongoing free movie (with popcorn) program featuring films relevant to Puerto Rico, past present and future, projected on building facades, open to everyone. South central Puerto Rico, long living in the shadow of San Juan, is proud and excited by the success of the school's outreach initiatives and the ambassadorship of the students.

During our visit, faculty and students from the Department of Architecture at the Pontificia Universidad Católica Madre y Maestra in the Dominican Republic visited the school to collaborate on a shared studio project. Students and faculty benefit from the diversity afforded by the exchange of people and projects with this sister institution.

- C. Architectural Education and the Regulatory Environment.** That students enrolled in the accredited degree program are provided with: a sound preparation for the transition to internship and licensure within the context of international, national, and state regulatory environments; an understanding of the role of the registration board for the jurisdiction in which it is located, and; prior to the earliest point of eligibility, the information needed to enroll in the Intern Development Program (IDP).

[X] The program is responsive to this perspective.

2013 Team Assessment: Students understand IDP and the regulatory environment. The majority of upper division students intend to fulfill IDP requirements, take the ARE and become licensed practitioners. A NCARB representative has twice visited the school in its 4-year existence lecturing to the school's academic community on IDP and regulatory issues.

A faculty member chairs the State Board of Registration. Together with the IDP Coordinator they fully inform the students and unlicensed faculty of regulations concerning professional licensure. The IDP Coordinator meets regularly with students and has met with the faculty and other licensed architects to inform them of the IDP process and encourage them to serve as mentors and supervisors. He is current with all IDP programs and procedures and regularly attends IDP meetings and information sessions including the Annual IDP Conference and regional meetings with the IDP State (Puerto Rico) Coordinator. There are approximately 20 students enrolled in IDP and some have begun acquiring the requisite experience through architect supervised work experience and volunteer service allowed under IDP 2.0.

- D. Architectural Education and the Profession.** That students enrolled in the accredited degree program are prepared: to practice in a global economy; to recognize the impact of design on the environment; to understand the diverse and collaborative roles assumed by architects in practice; to understand the diverse and collaborative roles and responsibilities of related disciplines; to respect client expectations; to advocate for design-based solutions that respond to the multiple needs of a diversity of clients and diverse populations, as well as the needs of communities and; to contribute to the growth and development of the profession.

[X] The program is responsive to this perspective.

2013 Team Assessment: All of the above parameters and goals of the profession are covered in the school's mission and vision statements, catalogue and other promotional materials including the school's evolving website. The nine Experimental Units described above in I.1.3.A. provide areas of concentration, both traditional and innovative, within an overall framework that can produce excellent candidates for the profession. This has energized the students, the university and the regional community as well as professionals across Puerto Rico who anticipate the positive impact of the first cohort of graduates. The school is on track to fulfill these professional goals and aspirations.

- E. Architectural Education and the Public Good.** That students enrolled in the accredited degree program are prepared: to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social, and economic challenges through design, conservation and responsible professional practice; to understand the ethical implications of their decisions; to reconcile differences between the architect's obligation to his/her client and the public; and to nurture a climate of civic engagement, including a commitment to professional and public service and leadership.

[X] The program is responsive to this perspective.

2013 Team Assessment: This condition is met with distinction.

The school aspires to achieve "regional empathy and landscapes of common good as the backbone of its academic, social, cultural and economic proposal for the southern region of Puerto Rico." By directly connecting to the region and city of Ponce, the school promotes the symbiotic relationships between public service, being a good citizen, and being a good architect.

The theme, Landscapes of Common Good, is expressed as "an interdisciplinary education of architecture as a vehicle to contribute to the improvement of our territories, landscapes and villages ... as a necessity rather than a possibility."

The program's nine Experimental Units provide a framework and sufficient flexibility to allow students to become engaged citizens. There are a number of examples of class projects and outreach programs that respond to this perspective. The Route 123 Agro-Tourism Corridor initiative implements planning, economic development, housing, entrepreneurship and self-management to revitalize the cultural, physical, natural, commercial and industrial assets between the communities of Ponce, Adjuntas and Castañer. Working with AARP in an initiative known as Urban Ecosystem for the Elderly, students and faculty explore ways that the architecture of housing can contribute to the sustainability of communities.

We were particularly impressed with the strong connection between the school and the greater Ponce community that has developed in just 3 ½ years. There is a mutual respect and enthusiasm, each seeking to capitalize on the opportunities of the other for the public good and advancement of the school's academic mission.

***1.1.4 Long-Range Planning:** An accredited degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and, where appropriate, the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision-making.*

[X] The program's processes meet the standards as set by the NAAB.

2013 Team Assessment: As a new school managing growth and developing the first version of a new curriculum, planning is ongoing. The coordinators of the Experimental Units who are responsible for each of the program's major subject areas lead curricular planning. Summaries of long range planning objectives for each unit are provided in the APR. At the school level, the dean, in consultation with the program director and coordinators, oversees long-range planning related to interdisciplinary objectives and resources. Current planning initiatives include a university-led process for a 2020 strategic plan. Planning is informed by data collection as shown in the Report to the Board of Trustees Finance Committee.

1.1.5 Self-Assessment Procedures: The program must demonstrate that it regularly assesses the following:

- *How the program is progressing towards its mission.*
- *Progress against its defined multi-year objectives (see above) since the objectives were identified and since the last visit.*
- *Strengths, challenges and opportunities faced by the program while developing learning opportunities in support of its mission and culture, the mission and culture of the institution, and the five perspectives.*
- *Self-assessment procedures shall include, but are not limited to:*
 - *Solicitation of faculty, students', and graduates' views on the teaching, learning and achievement opportunities provided by the curriculum.*
 - *Individual course evaluations.*
 - *Review and assessment of the focus and pedagogy of the program.*
 - *Institutional self-assessment, as determined by the institution.*

The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success as well as the continued maturation and development of the program.

[X] The program's processes meet the standards as set by the NAAB.

2013 Team Assessment: Evidence of self-assessment includes the implementation of a comprehensive survey of the school's students and constituents, and participation in university led assessment including student evaluations of teaching, ongoing analysis of enrollment data, and evaluations of program pedagogy and student performance. There is an active culture of consultation with professional and academic leaders including collaborators from allied fields. Faculty meeting minutes document the sharing of program information and assessment discussion.

PART ONE (I): SECTION 2 – RESOURCES

I.2.1 Human Resources & Human Resource Development:

- *Faculty & Staff:*
 - *An accredited degree program must have appropriate human resources to support student learning and achievement. This includes full and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. Programs are required to document personnel policies which may include but are not limited to faculty and staff position descriptions².*
 - *Accredited programs must document the policies they have in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA) and other diversity initiatives.*
 - *An accredited degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.*
 - *An accredited degree program must demonstrate that an IDP Education Coordinator has been appointed within each accredited degree program, trained in the issues of IDP, and has regular communication with students and is fulfilling the requirements as outlined in the IDP Education Coordinator position description and regularly attends IDP Coordinator training and development programs.*
 - *An accredited degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.*
 - *Accredited programs must document the criteria used for determining rank, reappointment, tenure and promotion as well as eligibility requirements for professional development resources.*

[X] Human Resources (Faculty & Staff) are adequate for the program

2013 Team Assessment: Faculty and staff resources are sufficient to support student learning and achievement. The coordinators of the Experimental Units receive appointments that reflect the additional time they spend on curricular leadership and development. Personnel policies including EEO provisions are documented for university staff and for faculty. The IDP Education Coordinator is knowledgeable about IDP matters, participates in IDP training programs and is in regular communication with students.

For the part-time faculty, professional development takes place largely in the professional realm outside of the assigned work of instructional appointments. There is ample evidence in faculty resumes and other documents regarding faculty activity to show faculty are engaged in ongoing professional development that contributes to program improvement.

The general criteria used for faculty appointments are listed in the university announcement for part-time positions.

- *Students:*
 - *An accredited program must document its student admissions policies and procedures. This documentation may include, but is not limited to application forms and instructions, admissions requirements, admissions decisions procedures, financial aid and scholarships procedures, and student diversity initiatives. These procedures should include first-time freshman, as well as transfers within and outside of the university.*
 - *An accredited degree program must demonstrate its commitment to student achievement both inside and outside the classroom through individual and collective learning opportunities.*

[X] Human Resources (Students) are adequate for the program

² A list of the policies and other documents to be made available in the team room during an accreditation visit is in Appendix 3.

2013 Team Assessment: Student admissions policies and procedures are documented on the school's website and in a recruiting brochure, as well as the APR. Equitable admissions eligibility and decisions are guided by an explicit university-wide point system. Vigorous efforts to recruit and advise new students are led by the program director and school public relations staff. The school conducts personal interviews with every applicant to ensure that applicants understand program expectations and to assess applicants' preparation to enter the program.

Support for student achievement inside and outside the classroom was evident in student work, the APR and school-wide exhibits. The strong sense of belonging within the school's community inspires involvement that promotes individual and collective learning. Students benefit from a high level of responsiveness from faculty and administrators as well as sufficient access to mentoring from instructors, professionals and peers. The AIAS and MAS provide additional leadership and extra curricular opportunities.

1.2.2 Administrative Structure & Governance:

- **Administrative Structure:** An accredited degree program must demonstrate it has a measure of administrative autonomy that is sufficient to affirm the program's ability to conform to the conditions for accreditation. Accredited programs are required to maintain an organizational chart describing the administrative structure of the program and position descriptions describing the responsibilities of the administrative staff.

[X] Administrative Structure is adequate for the program

2013 Team Assessment: The university website, the APR, the school's organizational chart and discussions with administrators, faculty, staff and students confirm that the administrative structure is adequate with sufficient autonomy to meet the conditions for accreditation. The school functions as an independent academic unit at the same tier of the university organization as the colleges and the law school. The dean reports directly to the vice president for academic affairs and maintains a direct working relationship with the president and board of trustees.

Within the school, the dean, associate dean, program director and director of operations work with staff assigned to various areas of responsibility and with the concentration area coordinators responsible for curriculum. Positions are well defined and form a comprehensive administrative structure.

- **Governance:** The program must demonstrate that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance.

[X] Governance opportunities are adequate for the program

2013 Team Assessment: The school sends elected student representatives to the university's student council and the university's academic senate, which represents both students and faculty. Since part-time faculty are ineligible for election to the senate, the dean currently serves as the faculty senator.

Governance within the school centers on monthly meetings open to all faculty and staff. Ad hoc committees are formed to address specific tasks such as the development of the 5th year capstone. Meetings are documented with agendas and minutes. Students have adequate opportunity to participate in program development through their communications with instructors and administrators.

1.2.3 Physical Resources: *The program must demonstrate that it provides physical resources that promote student learning and achievement in a professional degree program in architecture. This includes, but is not limited to the following:*

- Space to support and encourage studio-based learning
- Space to and encourage didactic and interactive learning.
- Space to support and encourage the full range of faculty roles and responsibilities including preparation teaching, research, mentoring, and student advising.

[X] Physical Resources are adequate for the program

2013 Team Assessment: Drawings and facilities/equipment descriptions included in the APR, additional information made available in the team room as well as a tour of the facilities and conversations with students, faculty and staff provided the following information.

The school is housed in the Forteza building constructed in 1928 as a department store. It is located on the east side of Ponce's central square (Plaza de las Delicias). The entrance to the school is through a fully glazed storefront accessed off Marina Street at grade level. Throughout our visit students populated the building lobby and adjacent first floor studios while curious passersby gazed through the storefront at the activity. The three story building has 13,000+/- sq. ft. of usable space on each floor bringing the school's total area to about 45,000 sq. ft. inclusive of service areas.

The school is equipped with a Teknion furniture system. Studio spaces are arranged in pods with individual student workstations (398 total design workstations) of 25-35+/- sq. ft. each, equipped with HP computers, dual HD 21" monitors and the requisite software. While the building is ample for the present and anticipated student population, there seems to be a shortage of space within the studio pods to easily collaborate on team projects or produce models and drawings. (There is currently adequate overflow space available for this type of work in other building areas.) As the school added enrollment, each floor was fitted out sequentially to accommodate each new cohort of students. This has caused some inflexibility of movement for the students as software licenses, particularly Revit and Creative Suite, are not readily forward or backward compatible.

There is a library with reading area; a fabrication lab with small and large CNC mills, laser cutters, and 3-D printers; a data center operating on a 64-bit Windows platform with a secure 16 terabyte Aberdeen Abernas server complimented by a DS3 internet connection with 45Mbps connection speeds; a media lab with 3 color plotters, a large-scale photocopier and, 4 11X17 color printers; an administrative suite with 7 offices, reception and conference space; 6 faculty office pods providing 85 sq. ft. for each faculty member and unit coordinator; an office suite for student organizations; a storage space to archive student work; 5 classrooms (1@425 sq. ft., 3@520 sq. ft., 1@638 sq. ft.); a lecture room @ 1,538 sq. ft. and 120 seat capacity; a student lounge and vending area on each floor; and a gallery/review area. Large assembly events are scheduled in nearby theater and government buildings.

1.2.4 Financial Resources: *An accredited degree program must demonstrate that it has access to appropriate institutional and financial resources to support student learning and achievement.*

[X] Financial Resources are adequate for the program

2013 Team Assessment: There is strong and continuing support, financially and otherwise, for the school from the university's central administration and board of trustees who view the architecture program as an important asset to the entire university. There is no evidence of financial or funding difficulties. APR Section 1.2.4 pp.81-87 provides data for fiscal years 2010-2011 and 2011-2012 which show a balanced position (revenues and expenses) and a negative position (loss) respectively. Projected finances for 2012-2013 shows a return to a positive position. As the school matures, admissions and enrollment are expected to become more predictable and thus, will facilitate the budgeting process.

I.2.5 Information Resources: *The accredited program must demonstrate that all students, faculty, and staff have convenient access to literature, information, visual, and digital resources that support professional education in the field of architecture.*

Further, the accredited program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resources professionals who provide information services that teach and develop research and evaluative skills, and critical thinking skills necessary for professional practice and lifelong learning.

[X] Information Resources are adequate for the program

2013 Team Assessment: While the information resources physically available are still limited in number at the school's CARIBET Library in the Forteza building, the *Information Resources Collection Development Plan* documents the strategy for future acquisitions as the program continues to mature. The *Information Literacy Program* provides information services that develop student research and evaluative skills. The relationship with the university's central library, the availability of interlibrary loans within and beyond Puerto Rico, and the investments in electronic books and databases provide adequate resources as the school's own facilities continues to grow. The library is closed on the weekends, but there are plans to hire additional staff and increase library hours in the near future.

PART I: SECTION 3 –REPORTS

1.3.1 Statistical Reports³. Programs are required to provide statistical data in support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.

- Program student characteristics.
 - Demographics (race/ethnicity & gender) of all students enrolled in the accredited degree program(s).
 - Demographics compared to those recorded at the time of the previous visit.
 - Demographics compared to those of the student population for the institution overall.
 - Qualifications of students admitted in the fiscal year prior to the visit.
 - Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.
 - Time to graduation.
 - Percentage of matriculating students who complete the accredited degree program within the "normal time to completion" for each academic year since the previous visit.
 - Percentage that complete the accredited degree program within 150% of the normal time to completion for each academic year since the previous visit.
- Program faculty characteristics
 - Demographics (race/ethnicity & gender) for all full-time instructional faculty.
 - Demographics compared to those recorded at the time of the previous visit.
 - Demographics compared to those of the full-time instructional faculty at the institution overall.
 - Number of faculty promoted each year since last visit.
 - Compare to number of faculty promoted each year across the institution during the same period.
 - Number of faculty receiving tenure each year since last visit.
 - Compare to number of faculty receiving tenure at the institution during the same period.
 - Number of faculty maintaining licenses from U.S. jurisdictions each year since the last visit, and where they are licensed.

[X] Statistical reports were provided and provide the appropriate information

2013 Team Assessment: Statistical data on architecture student characteristics is available in the Informe a Comité de Finanzas prepared for the Board of Trustees. Statistical data on architecture faculty characteristics are reported in the APR.

1.3.2. Annual Reports: The program is required to submit annual reports in the format required by Section 10 of the 2009 NAAB Procedures. Beginning in 2008, these reports are submitted electronically to the NAAB. Beginning in the fall of 2010, the NAAB will provide to the visiting team all annual reports submitted since 2008. The NAAB will also provide the NAAB Responses to the annual reports.

The program must certify that all statistical data it submits to NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.

The program is required to provide all annual reports, including statistics and narratives that were submitted prior to 2008. The program is also required to provide all NAAB Responses to annual reports

³ In all cases, these statistics should be reported in the same format as they are reported in the Annual Report Submission system.

transmitted prior to 2008. In the event a program underwent a Focused Evaluation, the Focused Evaluation Program Report and Focused Evaluation Team Report, including appendices and addenda should also be included.

[X] Annual Reports and NAAB Responses were provided and provide the appropriate information

2013 Team Assessment: The appropriate reports were provided.

I.3.3 Faculty Credentials: *The program must demonstrate that the instructional faculty are adequately prepared to provide an architecture education within the mission, history and context of the institution.*

In addition, the program must provide evidence through a faculty exhibit⁴ that the faculty, taken as a whole, reflects the range of knowledge and experience necessary to promote student achievement as described in Part Two. This exhibit should include highlights of faculty professional development and achievement since the last accreditation visit.

[X] Faculty credentials were provided and demonstrate the range of knowledge and experience necessary to promote student achievement.

2013 Team Assessment: With the exception of one full time faculty appointment, teaching is provided by over 40 part-time faculty who typically teach one or two courses. Faculty credentials documented in resumes and the faculty exhibit show that most faculty are registered architects who hold a professional bachelor's or master's degree in architecture. Many faculty have additional advanced degrees in fields related to their teaching assignments. Architectural practice is the primary mode of professional development for faculty members. A few faculty members are actively engaged in other modes of scholarship and community and professional service.

Taken as a whole the faculty demonstrates the knowledge and experience necessary to promote student achievement in all areas of the curriculum, as well as contribute to the school's civic engagement mission.

⁴ The faculty exhibit should be set up near or in the team room. To the extent the exhibit is incorporated into the team room, it should not be presented in a manner that interferes with the team's ability to view and evaluate student work.

PART ONE (I): SECTION 4 – POLICY REVIEW

The information required in the three sections described above is to be addressed in the APR. In addition, the program shall provide a number of documents for review by the visiting team. Rather than be appended to the APR, they are to be provided in the team room during the visit. The list is available in Appendix 3.

[X] The policy documents in the team room met the requirements of Appendix 3

2013 Team Assessment: Each document listed in Appendix 3 was found in the team room. See APR Part Four – Supplemental Information pp. 119-120 for a complete listing. These policies, protocols and other documents included:

- Institutional Policy Documents
- Administrative Policies and Protocols
- Academic Policies and Protocols

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

PART TWO (II): SECTION 1 – STUDENT PERFORMANCE – EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA

II.1.1 Student Performance Criteria: The SPC are organized into realms to more easily understand the relationships between individual criteria.

Realm A: Critical Thinking and Representation:

Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Recognizing the assessment of evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

A.1. Communication Skills: *Ability to read, write, speak and listen effectively.*

[X] Met

2013 Team Assessment: We were unable to evaluate student proficiency in spoken Spanish, however we found ample evidence of effective English speaking and listening skills that show the school has met this criterion.

Examples of graded research papers from ARHT 101 and 201 (Architectural History I and II) demonstrated ability to read and write. Essays written in ARLE 101 (Landscape Ecology and Environment), further demonstrated writing ability. Proficiency of the use and development of speaking and listening skills was demonstrated in presentations in the syllabi for ARAR 102 (Digital Representation Systems) and ARLE 101, and our observations of class discussions and design presentations.

A. 2. Design Thinking Skills: *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.*

[X] Met

2013 Team Assessment: We found evidence of this criterion in student process work produced in the Experimental Design Studio sequence ARAD 201, 202, 301, 302, and 401, as well as ARAD 402 (Contextual Design Studio II: Urban Scapes and Communities) a studio currently in progress.

A. 3. Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*

[X] Met

2013 Team Assessment: We found evidence of this criterion in the ARAR (Digital Representation Systems) sequence: traditional graphic skills were evidenced in ARAR 102, and digital technology and 3D representational skills in ARAR 302. The pairing of the ARAR sequence to the ARAD Experimental Design Studio sequence, particularly in ARAD 301, 302, and 401, has produced studio work that further reflects visual communication proficiency across media by students.

- A.4. Technical Documentation:** *Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.*

[X] Met

2013 Team Assessment: We found evidence of the ability to make technically clear drawings and assemblies in ARAD 301 (Experimental Design Studio II: Building Technology and Sustainability), ARST (Building Technology and Sustainability) 101 and 201, to write outline specifications in ARST 201, and present models of assemblies in ARAD 301 and ARAD 302 (Experimental Design Studio I: Structural Frameworks and Assemblages).

- A.5. Investigative Skills:** *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*

[X] Met

2013 Team Assessment: Students demonstrate this ability in the researched essays of the history sequence, particularly in ARHT 201 (Architectural History II: Neoclassicism to Contemporary). We found examples of investigative skills as applied to design in the contextual research of ARAD 401 (Contextual Design Studio I: Landscape Ecology and Environment), particularly as it pertains to the cultural and environmental context of *Ruta 123*, as well as ARAD 402 (Contextual Design Studio II: Urban Scapes and Communities).

While this criterion is met, we found many missing citations from referenced graphic and textual material. See section I.3 of this report, Cause of Concern 7.

- A. 6. Fundamental Design Skills:** *Ability to effectively use basic architectural and environmental principles in design.*

[X] Met

2013 Team Assessment: We found evidence of this criterion in documentation of student work from studios Experimental Design Studio sequence ARAD 201, 202, 301, 302 and 401, as well as environmental principles in ARST 201 (Introduction to Mechanical and Electrical Systems).

- A. 7. Use of Precedents:** *Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.*

[X] Met

2013 Team Assessment: We found evidence of this criterion in student process documentation from Experimental Design Studios ARAD 202 and 301, and ARLE 101 *Ruta 123* (Built Environment and Culture in the History of Landscape Architecture).

- A. 8. **Ordering Systems Skills:** *Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*

[X] Met

2013 Team Assessment: We found evidence of this criterion in documentation of student work from Experimental Design Studios, ARAD 201, 202, 301, 302 and 401.

- A. 9. **Historical Traditions and Global Culture:** *Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.*

[X] Not yet met

2013 Team Assessment: ARHT 201 (Architectural History and Culture II: Neoclassicism to Contemporary) and ARHT 301 (Architectural History III: Latin America and Puerto Rico) were identified by the school as providing understanding of historical traditions and global culture.

There is emphasis on vernacular and Caribbean architectural traditions of throughout the curriculum, including a strong focus on regional traditions in ARHT 301.

While we found extensive exam questions and written essays on traditions and canons of Western architecture in ARHT 101, 201 and 301, there was little evidence of student understanding of other global traditions. We found only three exam questions across the three-semester history sequence that addressed non-Western content, and did not find evidence of student understanding of architectural traditions and contexts that span Eastern, Western, Northern and Southern hemispheres.

- A. 10. **Cultural Diversity:** *Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.*

[X] Met

2013 Team Assessment: We found evidence of this criterion in the use of diverse clients for Experimental Design Studios ARAD 201, *Limbs for Haiti*, and ARAD 301, *Housing for Older Adults*.

- A.11. **Applied Research:** *Understanding the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.*

[X] Met

2013 Team Assessment: We found evidence of this criterion in the process documentation and outcomes of the *Colores de Coamo* project in ARAC 201 (Adaptive Conservation and Preservation) and the masonry block explorations in ARAD 302 (Experimental Design Studio).

Realm A. General Team Commentary: The foundational knowledge and skills required in Realm A are being substantively addressed in the program. While evidence from the final year is not yet available, there is indication that these learning outcomes are being continually developed as students progress through the curriculum.

Realm B: Integrated Building Practices, Technical Skills and Knowledge: Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally they must appreciate their role in the implementation of design decisions, and their impact of such decisions on the environment. Students learning aspirations include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Incorporating life safety systems.
- Integrating accessibility.
- Applying principles of sustainable design.

- B. 1. Pre-Design: Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.**

[X] Not Yet Met

2013 Team Assessment: Although the program identified ARAD 402 and ARAD 410 as the sources for student achievement of this criterion, the team found evidence in the third year courses: ARAD 301 (Building Technology and Sustainability) and ARAD 302 (Structural Framework and Assemblages) were identified by the program as providing pre-design ability.

Analysis of given programs and sites, and the selection and analysis of precedents is shown in student work completed in ARAD 301 and 302. Work completed in ARAD 402 (Contextual Design Studio II: Urban Scapes and Communities), an urban design studio being taught for the first time this semester, and not yet completed, includes site selection based on analysis of urban areas. Aspects of pre-design are also covered in ARDA 101 (Entrepreneurship and Development).

Although several studios and courses address aspects of pre-design, the program has not yet demonstrated through student work, students' ability to prepare a comprehensive program for an architectural project. Work underway in the spring 2013 version of ARAD 401 (Landscape Ecology and Environment) appears to include program preparation but student-produced programs were not available in the team room.

- B. 2. Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.**

[X] Not Yet Met

2013 Team Assessment: Attempts at accessible design that illustrate ability to integrate schematic versions of accessibility elements, such as ramps, are evidenced in ARLE 201 (Environment Construction Processes and Techniques) and ARAD 301 (Building Technology and Sustainability) and ARAD 302 (Structural Framework and Assemblages) however some of the ARAD 301 Housing for Older Adults projects lacked complete, systematic accessible circulation paths. The team observed instances in which bathrooms and main entries did not meet universal design standards, and the absence of fully accessible paths from public sidewalks and below-grade parking.

It is unclear where in the curriculum students will have repeat exposure that will ensure every student develops this ability. See section I.3 of this report, Cause of Concern 4.

- B. 3. Sustainability:** *Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.*

[X] Met

2013 Team Assessment: Student ability to develop ecologically sensitive site design strategies is evident in the work produced for ARAD/ ARAR 401 (Landscape, Ecology and Environment) and ARLE 201 Environment Construction Processes, Materials and Techniques). Ability to design for conservation of built resources and historic traditions is seen in ARAC 101 and ARAD 102.

- B. 4. Site Design:** *Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.*

[X] Met

2013 Team Assessment: We found evidence of student ability to respond to site characteristics in work produced for ARAD/ ARAR 401 (Landscape, Ecology and Environment) and ARLE 201 Environment Construction Processes, Materials and Techniques).

- B. 5. Life Safety:** *Ability to apply the basic principles of life-safety systems with an emphasis on egress.*

[X] Not Yet Met

2013 Team Assessment: Low pass work in ARAD 301 (Building Technology and Sustainability) showed inconsistent development and representation of building envelope and vertical circulation elements that are critical for developing the ability to apply life-safety principles that resolve egress requirements.

- B. 6. Comprehensive Design:** *Ability to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:*
- | | |
|--|-----------------------------------|
| A.2. Design Thinking Skills | B.2. Accessibility |
| A.4. Technical Documentation | B.3. Sustainability |
| A.5. Investigative Skills | B.4. Site Design |
| A.8. Ordering Systems | B.5. Life Safety |
| A.9. Historical Traditions and Global Culture | B.7. Environmental Systems |
| | B.9. Structural Systems |

[X] Not Yet Met

2013 Team Assessment: The school identifies ARAD/ARAR 410 (Legal and Administrative Awareness) and ARAD/ARAR 420 (Development Assessment and Entrepreneurship) as the design courses where students will acquire the ability to produce a comprehensive project. These courses will be offered for the first time in the 2013-14 academic year.

Student design work produced in the second, third and fourth year studios demonstrate the ability to integrate SPCs A.2, A.5, A.8, A.9, B.4 and B.7 across scales. We do not yet see evidence of the ability to integrate all of the above SPCs into a comprehensive architectural project.

- B. 7 Financial Considerations:** *Understanding of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.*

[X] Not Yet Met

2013 Team Assessment: The courses proposed to meet this criterion, ARDA 201 (Economic Feasibility and Finances in Real Estate) and ARAD/ARAR 420 (Development Assessment and Feasibility), have not yet been taught.

- B. 8. Environmental Systems:** *Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.*

[X] Met

2013 Team Assessment: Student work produced for ARST 201 (Introduction to Mechanical and Electrical Systems) and ARAD/ARAR 301 (Building Technology and Sustainability) show evidence of student understanding of principles of environmental systems.

- B. 9. Structural Systems:** *Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.*

[X] Not Yet Met

2013 Team Assessment: Student work provided for ARSF 201 (Composite Construction: Wood and Steel) shows adequate understanding of structural behavior principles for structural elements. Design

studio work produced in the third and fourth years shows understanding of appropriate application of gravity resisting structural systems, but not lateral load resisting systems.

- B. 10. Building Envelope Systems: *Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.***

[X] Not Yet Met

2013 Team Assessment: Student work produced in the ARAD 302 (Structural Frameworks and Assemblages) studios demonstrates understanding of the relationship between building envelope systems, material selection and façade design. Evidence of student work for the ARST 101 (Tectonics of Material Applications and Systems) and 201 (Introduction to Mechanical and Electrical Systems) technology courses was insufficient to ascertain that all students completing these courses understand the environmental performance of building envelopes.

- B. 11. Building Service Systems Integration: *Understanding of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems***

[X] Met

2013 Team Assessment: Student work for the ARST 101 (Tectonics of Material Applications and Systems) and 201 (Introduction to Mechanical and Electrical Systems) architectural technology courses showed basic understanding of building service systems integration through diagrams of plumbing and electrical systems. Vertical transportation and fire protection systems were identified in student design work in ARAD 301.

- B. 12. Building Materials and Assemblies Integration: *Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.***

[X] Met

2013 Team Assessment: Student work for ARST 101 (Tectonics of Material Applications and Methods) course and ARAD 302 (Structural Frameworks and Assemblages) studio projects showed basic understanding of materials and assemblies integration.

Realm B. General Team Commentary: Student work available for evaluation of the Realm B performance criteria centered primarily on the third year design and technology courses where students are introduced to building systems and their integration into architectural design. Although we found seven criteria to be not yet met, we saw progress being made toward meeting all Realm B criteria.

Courses identified for some of the SPC **Not Yet Met**, are scheduled for Year 5 which will be taught for the first time in 2013-2014.

Realm C: Leadership and Practice:

Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:

- Knowing societal and professional responsibilities
- Comprehending the business of building.
- Collaborating and negotiating with clients and consultants in the design process.
- Discerning the diverse roles of architects and those in related disciplines.
- Integrating community service into the practice of architecture.

C. 1. Collaboration: Ability to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.

[X] Met

2013 Team Assessment: The school identified the following third and fourth year design courses as providing *understanding* and *ability* respectively for this SPC.

ARAD/ARAR 301 (Building Technology and Sustainability) includes readings and project assignments that deal with materials, assemblies and systems. Evidence of *understanding* of collaboration of successful multi-disciplinary teaming is demonstrated.

ARAD/ARAR 302 (Structural Framework and Assemblages) further advances student exposure to structures and building assemblies. There is graphic representation of structural elements in relationship with building assemblies demonstrating an understanding of engineering and construction collaboration.

ARAD/ARAR 401 (Landscape, Ecology and Environment) provide a robust collaboration among planners, landscape architects, site/civil engineers and environmentalists as evidenced in the Ruta 123 project.

ARAD/ARAR 402 (Urban Scapes and Communities), which is being offered for the first time this semester, intends to extend this collaboration to urban design and the regulatory environment. Although there is only 1/2 of a semester's student work provided for review, there is indication that a multi-disciplinary approach is underway involving collaboration of the political and governmental sectors with public input.

C. 2. Human Behavior: Understanding of the relationship between human behavior, the natural environment and the design of the built environment.

[X] Met

2013 Team Assessment: The following fourth year design courses were identified by the school as providing understanding of project management.

ARAD/ARAR 401 (Landscape, Ecology and Environment) provides an understanding of the relationship between human behavior, the natural environment and the design of the built environment by engaging planners, landscape architects, site/civil engineers and environmentalists as evidenced in the Ruta 123 student project.

ARAD/ARAR 402 (Urban Scapes and Communities), which is being offered for the first time this semester, intends to extend this understanding of the relationship between human behavior, the environment and design involving urban design, the regulatory environment and public participation. Although there is only 1/2 of a semester's student work provided for review, there is indication that a

multi-disciplinary approach is underway involving collaboration of the political and governmental sectors with public input that will expose students to behavioral factors in the built environment.

C. 3 Client Role in Architecture: *Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.*

[X] Not Yet Met

2013 Team Assessment: The following fourth year courses were identified by the school as providing understanding of the client role in architecture.

ARLA 201 (Professional Practice and Contractual Procedures in Architecture) The course description implies that several aspects of the client role in Architecture are to be covered. However, evidence of student understanding could not be found.

ARUS 201 (Territorial and Urban Public Policy in a Global Society) There is approximately 1/2 of a semester's student work provided for review. There is indication that students will advance their understanding of the client role in architecture. Further evidence will not be available until the end of this semester.

C. 4. Project Management: *Understanding of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods*

[X] Not Yet Met

2013 Team Assessment: The following fourth year courses were identified by the school as providing understanding of project management.

ARLA 201 (Professional Practice and Contractual Procedures in Architecture) The course description states students will acquire a complete understanding of professional practice, contractual procedures, legal ordinances affecting it, and to secure and structure simple transactions. These are elements necessary for the understanding aspects of project management however, no evidence in student work could be found.

ARDA 201 (Economic Feasibility and Finances in Real Estate) The course description states students will be introduced to the fundamental concepts and practice of cost effective real estate planning and development. While this course may provide insights into the understanding of project management, there is only 1/2 of a semester's student work provided for review. Further evidence may be available at the end of this semester. At this time no evidence could be found.

C. 5. Practice Management: *Understanding of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.*

[X] Not Yet Met

2013 Team Assessment: The following fourth year courses were identified by the school as providing understanding of project management.

ARLA 201 (Professional Practice and Contractual Procedures in Architecture) The course description states students will acquire a complete understanding of professional practice, contractual procedures, legal ordinances affecting it, and to secure and structure simple transactions. These are elements necessary for the understanding aspects of practice management however, evidence of student understanding in the examinations for this course was insufficient.

ARDA 201 (Economic Feasibility and Finances in Real Estate) The Course Description notes students will be introduced to the fundamental concepts and practice of cost effective real estate planning and development. While this course may provide insights into the understanding of practice management, there is only 1/2 of a semester's student work provided for review. Further evidence may be available at the end of this semester. At this time no evidence could be found.

- C. 6. **Leadership: *Understanding of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.***

[X] Not Yet Met

2013 Team Assessment: The following fifth year courses were identified by the school as providing understanding of leadership.

ARAD/ARAR 420 (Developmental Design Studio II: Development Assessment and Feasibility/Independent Research II) ARDA 310 (Marketing & Branding through Commercial Communication Skills)

These courses will not be offered until Year 5 Semester 2 - Spring, 2014. Therefore, no student work is available at this time.

- C. 7. **Legal Responsibilities: *Understanding of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.***

[X] Met

2013 Team Assessment: The following fourth and fifth year courses were identified by the school as providing understanding of legal responsibilities:

ARLA 201 (Professional Practice and Contractual Procedures in Architecture) The course description states students will acquire a complete understanding of professional practice, contractual procedures, legal ordinances affecting it, and to secure and structure simple transactions. Evidence was found in examinations.

ARLE 301 (Ecological Principles in the Built Environment) This course will not be offered until Year 5 Semester 1 – Fall, 2014. Therefore, no student work is available at this time.

- C. 8. **Ethics and Professional Judgment: *Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues, and responsibility in architectural design and practice.***

[X] Not Yet Met

2013 Team Assessment: The following fourth year courses were identified by the school as providing understanding of the client role in architecture:

ARLA 201 (Professional Practice and Contractual Procedures in Architecture) The course description implies that several aspects of ethics and professional judgment are to be covered. However evidence of student understanding could not be found.

ARUS 201 (Territorial and Urban Public Policy in a Global Society) There is approximately 1/2 of a semester's student work provided for review. There is indication that students will advance their understanding of ethics and professional judgment. Further evidence will not be available until the end of this semester.

- C. 9. **Community and Social Responsibility: *Understanding of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.***

[X] Met

2013 Team Assessment: The school identified the following fourth and fifth year courses as providing understanding for this SPC:

ARAC 301 (Conservation Planning Strategies and Policies) There is approximately 1/2 of a semester's student work provided for review. There is indication that students will advance their required understanding of community and social responsibility particularly with respect to historic resources at a local/regional level. Further evidence will not be available until the end of this semester.

ARUS 301 (Territorial Planning Strategies on Infrastructures and Communities) This course will not be offered until Year 5 Semester 1 – Fall, 2014. Therefore, no student work is available at this time.

ARAD/ ARAR 401 (Landscape, Ecology and Environment) provides an understanding of the architect's responsibility to work in the public interest, and to improve the quality of life for local and global neighbors as evidenced in student work for the Ruta 123 project.

Other initiatives evidencing community and social responsibility include: working with AARP in an initiative known as Urban Ecosystem for the Elderly where students examined prevalent social and typological constraints to explore new housing models for the elderly; and Limbs for Haiti which provided organizational design parameters and alternatives for a health services clinic and orphanage in Port-au-Prince, Haiti.

Given that evidence is not available for the second half of ARAC 301, and ARAC 301 has not yet been offered, evidence from ARAD/ARAR 401 and other initiatives have been cited as substantiation that an understanding of community and social responsibility is met at this time.

Realm C. General Team Commentary: We found that the requirements for Realm C- Leadership and Practice were **Met** in the sources identified in the APR, and student evidence in the team room, for SPC: C.1: Collaboration, C.2 Human Behavior, C.7 Legal Responsibilities and C.9 Community and Social Responsibility. Sufficient evidence (or in some cases any evidence) was not found to confirm an understanding for the following SPC: C.3 Client Role in Architecture, C.4 Project Management, C.5 Practice Management, C.6 Leadership, C.8 and Ethics and Professional Judgment.

The courses identified for SPC **Not Yet Met**, with the exception of ARLA 201 Professional Practice and Contractual Procedures in Architecture, have only completed coursework for 1/2 of a semester or are not scheduled until Year 5, 2013-2014.

PART TWO (II): SECTION 2 – CURRICULAR FRAMEWORK

II.2.1 Regional Accreditation: *The institution offering the accredited degree program must be or be part of, an institution accredited by one of the following regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); and the Western Association of Schools and Colleges (WASC).*

[X] Met

2013 Team Assessment: The Pontificia Universidad Católica de Puerto Rico is accredited by the Middle States Commission on Higher Education, and was reaffirmed November 19, 2009. The source of this information can be found in APR Part Four – Supplemental Information, Appendix 5: Regional and National Accreditation Status, pp. 127-129.

II.2.2 Professional Degrees and Curriculum: *The NAAB accredits the following professional degree programs: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and electives. Schools offering the degrees B. Arch., M. Arch., and/or D. Arch. are strongly encouraged to use these degree titles exclusively with NAAB-accredited professional degree programs.*

[X] Met

2013 Team Assessment: The program is scheduled to grant its first Bachelor of Architecture degree to the initial class of students in May, 2014. The 192 credit B Arch program, with available minors in nine areas of concentration, spans a 5-year period divided in seven (7) semesters of eighteen (18) credit hours each, three (3) semesters of nineteen (19) credit hours each, a summer of six (6) credits, and a summer of three (3) credits. The total credits are subdivided as follows:

- 54 credits – General Education Courses
- 50 credits – Architectural Design Studios
- 10 credits – Architectural Representation Laboratories
- 69 credits – Professional Concentration Courses
- 9 credits – Elective Courses (selected from the list of courses used to fulfill a minor in one of the nine areas of concentration. Completion of a minor is optional and students may choose to combine electives from different subject areas)

See section I.3 of this report, Concern 1 for potential impacts of the number of credits required for the degree.

II.2.3 Curriculum Review and Development

The program must describe the process by which the curriculum for the NAAB-accredited degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed, approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that licensed architects are included in the curriculum review and development process.

[X] Met

2013 Team Assessment: The school's process for curriculum review and development, included in APR Sections I.1.4, pp. 41-46, I.1.5 pp. 46-52, was discussed with administrators and faculty.

The school uses a multi-level course, faculty and program evaluation system which includes: periodic academic progress assessments; weekly meetings of administrators, experimental unit coordinators and the dean; and annual student evaluations of the program. The university's assessment protocols for faculty and courses inform the school's review and development processes. The school's outreach activities invite feedback from community and professional partners that inform curriculum development.

Members of the faculty who are registered architects as well as architects who participate in school activities contribute to the curriculum review and development process.

PART TWO (II) : SECTION 3 -- EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION

Because of the expectation that all graduates meet the SPC (see Section 1 above), the program must demonstrate that it is thorough in the evaluation of the preparatory or pre-professional education of individuals admitted to the NAAB-accredited degree program.

In the event a program relies on the preparatory/pre-professional educational experience to ensure that students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the accredited degree program. This assessment should be documented in a student's admission and advising files.

[X] Met

2013 Team Assessment: We reviewed the procedures used to evaluate internal and external transfer students' prior coursework through an examination of policies, forms, and sample documentation from a student file.

In general, the program does not rely on preparatory or pre-professional education to meet SPCs. The vast majority of students meet all of the NAAB SPC at the PUCPR. In cases when students are transferring from another undergraduate architecture program to the PUCPR, the program director evaluates prior coursework and a portfolio of design work to determine appropriate placement of the student in the program.

PART TWO (II): SECTION 4 – PUBLIC INFORMATION

II.4.1 Statement on NAAB-Accredited Degrees

In order to promote an understanding of the accredited professional degree by prospective students, parents, and the public, all schools offering an accredited degree program or any candidacy program must include in catalogs and promotional media the exact language found in the 2009 NAAB Conditions for Accreditation, Appendix 5.

[X] Not Yet Met

2013 Team Assessment: While the NAAB statement was found on the program's website at http://website.pucpr.edu/arquitectura/?page_id=1907, the requisite text was not included in the printed Official School Catalog 10/12.

II.4.2 Access to NAAB Conditions and Procedures

In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must make the following documents available to all students, parents and faculty:

*The 2009 NAAB Conditions for Accreditation
The NAAB Procedures for Accreditation (edition currently in effect)*

[X] Met

2013 Team Assessment: Current versions of the *NAAB Procedures for Accreditation* and the *NAAB Conditions for Accreditation* are in the reserve section of CARIBET Library. Both documents were also found online, under the NAAB section of the website at http://website.pucpr.edu/arquitectura/?page_id=1907.

II.4.3 Access to Career Development Information

In order to assist students, parents, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of accredited degree programs, the program must make the following resources available to all students, parents, staff, and faculty:

*www.ARCHCareers.org
The NCARB Handbook for Interns and Architects
Toward an Evolution of Studio Culture
The Emerging Professional's Companion
www.NCARB.org
www.aia.org
www.aiaa.org
www.acsa-arch.org*

[X] Met

2013 Team Assessment: Printed publications were available in the reserve section of CARIBET Library, and links to the various resources were found on the program's website in its NAAB section at http://website.pucpr.edu/arquitectura/?page_id=1907.

II.4.4 Public Access to APRs and VTRs

In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents available to the public:

- All Annual Reports, including the narrative*
- All NAAB responses to the Annual Report*
- The final decision letter from the NAAB*
- The most recent APR*
- The final edition of the most recent Visiting Team Report, including attachments and addenda*

These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their websites.

[X] Met

2013 Team Assessment: The recent Architecture Program Report was found at CARIBET Library in the reserves section. Links to the requisite documents were also online on the program's website in its NAAB section at http://website.pucpr.edu/arquitectural?page_id=1907.

II.4.5 ARE Pass Rates

Annually, the National Council of Architectural Registration Boards publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered to be useful to parents and prospective students as part of their planning for higher/post-secondary education. Therefore, programs are required to make this information available to current and prospective students and their parents either by publishing the annual results or by linking their website to the results.

[X] Met

2013 Team Assessment: A link to NCARB's information on ARE (Architectural Registration Examination) Pass Rates was found on the program's website in its NAAB section at http://website.pucpr.edu/arquitectural?page_id=1907. Specific pass rate information for the program will not be available until graduates take the ARE.

III. Appendices:

1. Program Information

[Taken from the *Architecture Program Report*, responses to Part One: Section 1 Identity and Self-Assessment]

A. History and Mission of the Institution (I.1.1)

Reference Pontificia Universidad Católica de Puerto Rico APR, pp. 7-9

B. History and Mission of the Program (I.1.1)

Reference Pontificia Universidad Católica de Puerto Rico, APR, pp. 9-17

C. Long-Range Planning (I.1.4)

Reference Pontificia Universidad Católica de Puerto Rico, APR, pp. 41-46

D. Self-Assessment (I.1.5)

Reference Pontificia Universidad Católica de Puerto Rico, APR, pp. 46-53

2. Conditions Met with Distinction

The school has responded to the NAAB Perspective: Architectural Education and the Public Good with distinction.

See section I.1.3 E of this report.

3. The Visiting Team

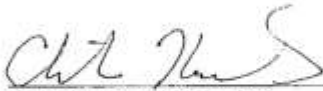
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IV. Report Signatures

Respectfully Submitted,



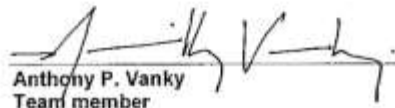
Christine Theodoropoulos
Team Chair

Representing the Academy



Ronald J. Battaglia, FAIA
Team member

Representing the Profession



Anthony P. Vanky
Team member

Representing the NAAB

IV.5. PROGRAM CATALOG

The latest School Catalog is available for viewing and downloads from the PCUPR School of Architecture's website (www.pucpr.edu/arquitectura) under the "PROGRAMA" Tab. A new School Catalog is currently being drafted by both administrative and academic staff.

The direct URL for accessing the document is:
http://www.pucpr.edu/arquitectura/?page_id=332.

