

Annual Key Assessment Findings and Curricular Improvements
School of Architecture and Planning
Undergraduate (B.S.) Program in Architecture

AY2011-2012

Key Assessment Findings

Specialized Accreditation Data

Architectural Accreditation: The National Architectural Accreditation Board (NAAB) reviews the school every six years. The most recent site visit, in February 2009, resulted in renewal of full accreditation. Of the 34 academic criteria used by NAAB, the visiting team found that thirteen were “well met” (exceeded expectations) and only three were “not met”, one of which was dropped as a criterion in the revised criteria approved in July 2009. This is an unusually favorable outcome.

Professional Licensure: A multi-day examination (the ARE) is required for professional licensure in architecture. Since most graduates do not take this examination for at least three years after graduation, and often longer, passage rates for alumni are not cited here.

Certification: A small number of students opt to take certification exams to become LEED® APs (LEED® Accredited Professionals) or CDTs (Certified Documents Technologists). The former is a program of the United States Green Building Council (USGBC) while the latter is conducted by the Construction Specifications Institute (CSI). Passage rates are quite high for those who take the exams.

Comprehensive Exams

The Comprehensive Building Design Studio (CBDS) and Supplement

The school conducts no comprehensive exams *per se*, but completion of CBDS is required.

In CBDS, students are tested on their mastery of subjects learned in their professional studies through performance designing a real project for a real client. The courses are organized in a way intended to simulate the work environment of architectural practitioners, and therefore comes with professional performance expectations. It functions as a capstone for the accredited program – the four-year B.S.Arch program and the first two years of the M.Arch3 program.

The studio focuses on a rigorous semester-long team project that requires development of urban design, architectural design, construction systems, environmental systems, structural systems, and building envelope for a project with a moderately complex program.

The studio component stresses collaboration among members of each student design team and with outside professional consultants. Client interaction is also stressed. Those role-playing the clients come in to discuss the project at the beginning of the semester and come to the major reviews to give student teams feedback.

The supplement course reviews a broad range of undergraduate material from prerequisite courses. For the first half of the course, a mix of faculty and local practitioners lecture on the

various topics. In the second half, the practitioners serve as consultants to the individual student teams. At the end, they return to evaluate individual students through oral exams.

Team Project: The Building Design (Studio: ARPL 402/602)

The project is completed in teams much like an architecture project would be completed in a professional environment. In spring 2012, nineteen teams, totaling one hundred one (101) students participated. Three teams partly met expectations in formal design and research, technical design, and communication.

Individual Project: The Detail Design (Studio: ARPL 402/602)

In spring 2012, one hundred one (101) students completed the design of a set of construction details. Although the building as a whole is designed in teams, each student is required to design, in detail, one part of the building from foundation to roof, from one column to the next, and from the exterior wall to about ten feet inside the building. This way, students can demonstrate their understanding of construction, structural, and infrastructural systems, of the coordination of those systems, and of building envelope. While most students met the requirements, 22% -25% only partly met the expectations.

Individual Examinations (Supplement: ARPL 423/623)

In spring 2012, one hundred (100) completed the Comprehensive Oral exams. One of the students had completed ARPL623 in a previous semester so did not participate in the Spring 2012 Supplement course. At the end of the studio, before the final presentation, the CBDS faculty administer the oral defenses, one on one with individual students. They assess how much each student understands the various disciplines involved in the project design, as well as the comprehensive whole. We conducted Architectural, Structural, Mechanical, Electrical, and Plumbing Systems oral defenses this year.

**Table of Results
Student Learning Assessment Rubric
School of Architecture and Planning
Comprehensive Building Design Studio + Supplement**

Individual Assessment	Level						Mean	SD	Total N
	Exceeded Expectations (3pts)		Met Expectations (2pts)		Partly Met Expectations (1pt)				
	N	%	N	%	N	%			
1) Research	36	36%	43	43%	22	22%	2.14	0.75	101
2) Formal design	36	36%	43	43%	22	22%	2.14	0.75	101
3) Technical design	29	29%	46	46%	25	25%	2.04	0.74	100
4) Communication	29	29%	46	46%	25	25%	2.04	0.74	100

Team Assessment	Level						Mean	SD	Total N
	Exceeded Expectations (3pts)		Met Expectations (2pts)		Partly Met Expectations (1pt)				
	N	%	N	%	N	%			
1) Research	4	21%	12	63%	3	16%	2.05	0.62	19
2) Formal design									
3) Technical design									
4) Communication									

- Notes: 1) The mean is the average of all scores across the levels within the trait.
2) The standard deviation (SD) is a measure of the variability of the data set, indicating how "spread out" these data are from the mean value.
3) The total number of projects assessed was 19; the total number of individuals assessed was 98 as one of the original 99 withdrew.

Curricular Improvements

Recent improvements to the CBDS program

Size and complexity of projects: This past year, the project was a reasonable size, but again students complained that it was too large and too complicated. We continue to strive for the ideal project size.

Future planned improvements

This past year, there was a situation where one student had successfully passed the Supplement course but not the Studio course. Given the intertwined nature of the two courses, this proved difficult for the student as well as his/her collaborating team members. In Spring 2013, the course will be offered as one 9-credit course with content remaining the same.

Curricular changes: We have undergone curriculum changes; however students do not seem as well prepared for the scope of the capstone studio as in past years. Perhaps the scope needs to be redefined to reflect the change in the curriculum. This year also, there continued to be disparity among students related to preparedness and knowledge of computer programs.

Revision of the technical design curriculum: Although the building technology sequence has been revised, students are still struggling with detailing building assemblies. The studio will foster more direct relationships with the local professional community to assist students in developing the design project. The studio will also engage the building technology faculty to interact more directly with the studio as "floating consultants" as students engage in the development of the design project.