

**Annual Key Graduate Assessment Findings and Curricular Improvements
School of Architecture and Planning
Graduate (M. Arch) Program in Architecture**

AY2015-2016

Key Assessment Findings

Specialized Accreditation Data

Architectural Accreditation: The National Architectural Accreditation Board (NAAB) reviews the school every three to eight years based on the accreditation report. The most recent site visit, in April 2016, resulted in renewal of full accreditation for the maximum term of eight years. NAAB found 5 conditions met with distinction, 41 conditions met and 9 conditions not met. Of those not met, most relate to our facility. This is an extremely 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. The CUA School of Architecture and Planning has been accepted by NAAB to offer an Integrated Path to Architecture License (IPAL) curriculum. IPAL integrates the accredited curriculum with internship development and Architectural License Examinations into the six-year BS Arch + M Arch programs.

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.

Thesis

A thesis is a well prepared, thoroughly researched, original work which contributes to the body of architectural knowledge/scholarship. It is the final evaluation of students in the graduate program and it is comprised of two semesters' coursework –thesis preparation and thesis design. Thesis is carried out independently with the assistance of consulting advisors. Thesis students may take a Thesis Studio that meets twice weekly or they may apply for an independent thesis that is independently scheduled with an advocate and advisors.

The consulting advisors for independent thesis are typically comprised of a base group of two faculty members that are a set team, and another person that is either a faculty member or a professional that has knowledge of the particular subject. The thesis student also chooses one of the advisors to be an advocate and meets with that person weekly, while only meeting with the thesis committee on structured dates throughout the semester (roughly amounting to every two to three weeks). This overall body of advisors or thesis committee is selected by the student, and is not limited in number. Students choosing thesis studio meet twice a week in 4 hour sessions and

are consulted by one or more of the thesis studio instructors. Independent advisors are encouraged and meet with students outside of studio time.

The expectation of a thesis student is that they should be able to propose a thesis question of academic and/or practical significance, to pursue that thesis through appropriate means and methods of research, and to finally defend the thesis orally. As a component of the thesis defense, students either graphically or textually present the project.

There are five Concentrations in the graduate program- Cultural Studies/Sacred Space, Media Technology and Interiors, Urban Practice, Real Estate Development and Classical Architecture. The thesis project in each Concentration is broken down into four distinct thesis categories- each of which can be steered by the individual towards a focus on PROCESS or PRODUCT.

1. Building Design Thesis
2. Urban Design Thesis
3. Theoretical / Methodological Thesis
4. Written / Research Thesis

Thesis Studio I (Lecture, Seminar, Independent Research: ARPL 696A, 3credits)

Thesis Preparation is the first required course of the Thesis Program. The first few weeks focuses on research methodologies. Students learn what constitutes a thesis, how to conduct research and available research tools, the difference between methodology (quantitative and qualitative) and how to translate research into design inquiry. They also learn how to formulate research questions, hypothesis, and processes for investigations. In the end, they learn to formulate an argument (selecting written and graphic evidence) and how to present that research with organizational clarity. Thesis Preparation incorporates the selection of a significant hypothesis involving challenging design issues (subject to faculty approval), followed by extensive research.

Students are required to submit a final thesis document at the end of the Thesis Preparation. The document contains a clear, concise thesis statement, a claim or problem statement which is supported through rigorous research and a methodological outline for testing the thesis in the subsequent design semester. Selection of site, program and additional analysis is encouraged.

Thesis Studio II (Independently Directed Studio: ARPL 696B or D, 6 credits)

The Thesis Design semester involves the testing of a thoroughly developed thesis. With input from the advocate and advisory group, students outline goals and objectives at the beginning of the semester. As projects and processes typically vary widely from student to student, the student is expected to work closely with the thesis faculty to develop an appropriate means for testing the concepts and ideas initially put forth during the Thesis Research semester.

One caveat to the sequence is the stop/go review at the end of the thesis design semester. At that point, if a student is not ready to defend the thesis orally to a group of invited jurors, they may opt to stay an additional semester or more, only needing to sign up for one extra credit for that extra time. Hence, during thesis design, more students that previously stopped themselves might end up joining a group of students in the sequence if they are ready to present at that time.

Thesis Categories

Building Design Thesis

A building design thesis is one in which a student wishes to explore an architectural question which relates directly to a particular building type, use or adaptive reuse (for example a firehouse, courthouse, hotel, recreation center).

Required minimum deliverables for assessment include:

1. Thorough research of the building typology, systems, and construction methods,
2. Thorough research of site and applicable zoning and building code,
3. Thorough investigation of conceptual posture,
4. Identification and analysis of applicable case studies/precedent projects and technologies,
5. A clear, complete and transparent design process,
6. Applicable documentation in diagram form illustrating design variables / parameters, criteria, logics and how they contribute to the conceptual, analytical and/or functional aspects of the proposed work,
7. Complete documentation of proposed building in appropriate architectural drawings (plan, section, elevation etc.) at a scale appropriate to the project,
8. Experiential graphics exterior and interior (digital or conventional perspective) which are rendered so as to communicate an understanding of the occupation of the architecture,
9. Documentation of proposed active/passive systems, materials and methods and detail as appropriate to the project,
10. Physical model of site at an appropriate scale illustrating sufficient contextual and urban conditions,
11. Physical model of the building at an appropriate scale illustrating spatial conditions / relationships, construction methods, tectonics and enclosure,
12. Documentation of proposed active/passive systems, materials and methods and detail as appropriate to the project.

Urban Design Thesis

An urban design thesis is one in which a student wishes to explore an architectural question which relates directly to the design or adaptation of public space at the urban scale (a proposal for the redesign of Baltimore's Market Square, A New Town in French Guiana, linking nodes through pedestrian paths in Pittsburg). This thesis category steers towards a product deliverable (a building).

Required minimum deliverables for assessment include:

1. Thorough historic and analytic research of subject city, or in the case of a new city – its regional context,
2. Thorough research of geographic, geological and climatic information,
3. Thorough research of cultural context,
4. Identification and analysis of applicable case studies,
5. A clear, complete and transparent design process,
6. Applicable documentation in diagram form illustrating design variables / parameters, criteria, logics and how they contribute to the conceptual, analytical and/or functional aspects of the proposed work,

7. Complete documentation of proposed urban plan in appropriate architectural drawings (figure-ground, sections, analytic, etc.) at a scale appropriate to describe human occupation,
8. Experiential graphics (digital or conventional perspective) which are rendered so as to communicate an understanding of the occupation of public space,
9. Physical model of site at an appropriate scale illustrating sufficient contextual and urban conditions.

Theoretical / Methodological Thesis

A theoretical thesis is one in which a student wishes to explore a particular architectural idea and or methodology, which may or may not apply directly to a particular building or urban design type (for example algorithmic design methodologies, transparency in architecture, critique of assessment of architectural representation). Required minimum deliverables for assessment are more particularly specific to the subject undertaken than in other categories requiring an understanding between student and advisory body about the intended scope. Students wishing to undertake a theoretical/methodological thesis should obtain permission in advance from the committee and provide a schedule of research and production.

Required minimum deliverables for assessment include:

1. Thorough research in the area of theory/methodology being explored in architecture and other disciplines,
2. An annotated research bibliography,
3. A clear, complete, and transparent design,
4. Applicable documentation in diagram form illustrating design variables/parameters, criteria, logics and how they contribute to the conceptual, analytical and/or functional aspects of the proposed work,
5. Ability to orally defend the theoretic proposal made using citation to research,
6. A set of deliverables appropriate to the subject agreed upon with the thesis committee.

Written / Research Thesis

A research thesis is one in which a student wishes to study a particular architectural subject in order to contribute meaningful knowledge to the body of architectural scholarship (for example Tolerance in Computer Controlled Prefabrication in Architectural Design, Computational Design Methodologies, Impact of Wood Species in Timber Frame Construction, Analysis of Southern Maryland Passive Solar Potential). A research thesis should be formatted in both written and presentation form for final jury presentation.

Required minimum deliverables for assessment include:

1. Thorough research in subject area,
2. Appropriate originally-obtained data collection,
3. Appropriate second-party data collection,
4. Clear definition of research parameters and methods of observation,
5. Case studies of like research,
6. Definitive contribution of new knowledge,
7. Positive assessment by committee for publishing potential.

Upon completion of thesis design, students submit a final thesis documents to the Thesis Committee and Thesis Coordinator, that includes the original Thesis Research Document with any required revisions and amendments, complete documentation of the Thesis Design – including process and product, formatted according to University guidelines, and a one to two page summary of the evolution of the thesis from research to design.

	Exceeding Expectations (3 pts)		Meeting Expectations (2 pts)		Below Expectations (1 pt)		<i>Mean</i>	<i>SD</i>
Thesis Sequence								
Thesis Preparation (Fall 15)	1	5%	20	95%	0	0%	2.05	.54
Thesis Design (Fall 15)	3	18%	14	82%	0	0%	2.18	.43

	Exceeding Expectations (3 pts)		Meeting Expectations (2 pts)		Below Expectations (1 pt)		<i>Mean</i>	<i>SD</i>
Thesis Sequence								
Thesis Preparation (Sp 16)	1	13%	6	75%	1	13%	2.00	.36
Thesis Design (Sp 16)	3	27%	5	45%	3	27%	2.00	.10

- 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.

Curricular Improvements

Recent improvements to the Thesis program

Evaluation of student work: In previous semesters we addressed the wide variance in quality between thesis committees and between thesis students. Thesis projects on the whole now are more similar in their intentions if not end result. Allowing a student to tailor thesis committee more to research topics gives students more sense of responsibility and allows faculty to work more closely with only the students they are directly involved with.

Outside Consultants: This past academic year, we have placed an increased focus on the involvement of ‘outside consultants’. Each thesis student is required to enlist the help of two consultants from outside the School of Architecture in the development of their thesis. The intention of this focus is to increase the involvement of outside professionals in the Washington, DC region and increase the exposure of the thesis program and the school

ARPL636 Design Methods and Processes is a required class and prerequisite to ARPL696a Thesis Studio I/Thesis Research. This course teaches students the methods of conducting research from a design perspective. By taking this course first, students have had better success in Thesis Studio I/ Thesis Research.

Future improvements to the Thesis program

Thesis Studio II was developed to aid those students who do not have strong time management skills. By requiring two meetings weekly, the student is forced to produce work consistently. Some students have reported that the instructor-to-student ratio in the studio is too large and that the consultations need to be longer. This is currently under discussion in the curriculum committee and an additional instructor was brought in this fall to aid with critiques.