

## 48505 Thesis 2\_ Experiment + Prospect



*“There are things that intelligence alone is able to seek, but which, by itself, it will never find. These things, instinct alone could find; but it will never seek them.”*

Henri Bergson

<b>Description</b>	Architecture is a social, creative, technical and theoretical vehicle for exploration and the intent of this course is to provide an environment of research and creative inquiry to advance the field of design. Thesis II is devoted to inquiry, testing and development of these explorations and the project-based thesis is creative undertaking founded on an open mind, technical competence and enriched by the dynamic process of discovery. Thesis work does not extend from precepts but emerges from exploratory thinking substantiated by experimentation and risk-taking. Thesis II is a self-motivated, intellectual endeavor, with three review points during the semester.
<b>Objectives</b>	1) Ability to apply research methods to a design project; 2) Ability to work collaboratively; 3) Ability to develop design prospects through modeling, scripting, simulation, fabrication or other media relative to the inquiry, and 4) Development of fluid reasoning - the capacity to think logically and creatively solve problems in novel situations.
<b>Structure</b>	Thesis 2 is a studio, meeting M + W with three public dialogues. The role of the advisors is to provide critique and help shape a design method. Projects may be collaborative or individual.
<b>Pedagogy</b>	The pedagogy of Thesis 2 stems from the educational philosophy of William James and from John Dewey’s certainty that learning is based in discovery and mentoring, not the blind transfer of information from teacher to student. The pedagogy also draws from the efficacy of logic and intuition described by Henri Bergson (quote above). More recently, influence is taken from Donald Schön’s discussion of the design process as “a reflective conversation with the materials of a design situation” and that design is a tacit means of “knowing-in-action.’ In this light, the process is open-ended, punctuated with moments of clarity.

<b>Dialogue 1</b>	<p><b>Scope/Method/Feedback</b></p> <p>Clearly articulate knowledge of your topic, project scope and working process. At the heart of the often-messy creative process, is the ability to form patterns in your work and gain feedback. In Thesis 2, alternate modes of design exploration that produce knowledge and discovery are encouraged.</p>
<b>Dialogue 2</b>	<p><b>Decision Making / Self-evaluation/Design Strategy</b></p> <p>The prospects of your research project are clearly identified and demonstrated through your chosen media. Decisions are more thoroughly tested and refined with focus on self-critique and evaluation. Investigations are made at a larger and more detailed scale.</p>
<b>Dialogue 3</b>	<p><b>Final Review / Exhibition</b></p> <p>This phase is both a summation and inventory of work over the course of the project's development and is a final opportunity to develop new modes of communication.</p>
<b>Thesis Book</b>	<p>An 8.5 x 11 booklet as an ongoing documentation for Thesis 2. The contents should describe the literature review, research method/feedback and project progress in written and visual form. Post books to the server at the first two Dialogue dates, the midterm date (3/8) and the final date (TBA). (pdf file exported from InDesign as 'Press Quality')</p>
<b>Committees</b>	<p>A minimum of two committee members is required. One is your thesis advisor (primary supervision responsibility) and it is recommended that at least one member has expertise outside of the field of architecture. Faculty members within the school of architecture are recommended and may be added at your digression and their acceptance. Committee members should be available to meet with students at least three times during the semester.</p>
<b>Grading</b>	<p>50% motivation, participation and self-direction, 50% final thesis presentation and documentation Grading is the responsibility of the three primary advisors.</p> <p>Grading Criteria</p> <ul style="list-style-type: none"> <li>• Thoroughness of research and project development</li> <li>• Quality of Communication (Visual and Written)</li> <li>• Creative Synthesis and Organizational Logic</li> <li>• Relevancy</li> </ul>
<b>Reading</b>	<p>Given by advisor.</p>
<b>Resources</b>	<p>Carnegie Mellon School of Architecture Undergraduate Thesis Digital Library MIT Thesis Library Other open access thesis databases</p>

**A note on Thesis Culture:**

Thesis culture is at the core of our working process. It is yours to construct. If we do it well, Thesis is a profoundly meaningful experience to both the individual and the wider community.

## Dialogue 1

### Scope/Method/Feedback

15 minute presentation/demonstration of the subject field, site, program, design method and explorations/results. Clearly identify the significance of the thesis relative to contemporary issues in architecture.

1. Sources\_ A list of annotated sources which have informed the thesis. This is the foundation that supports the inquiry.
2. Models, Design Experiments + Tests
  - A. Include a series of working models, drawings or other media that test your thesis topic
  - B. Define an experimental set-up/method that enables you to get feedback  
Demonstrate knowledge gained and the feedback gained from the process of modeling
3. Environmental Research
  - A. Clearly articulate the environmental context of the project
  - B. Site context, flows, compositional patterns, and spatial organization
4. Booklet submission to the server

## Dialogue 2

### Decision Making / Self-evaluation/Design Strategy

15 minute presentation/demonstration focusing on design strategy and development.

1. Present methodology up to this point in detail
2. Intermediate orthographic drawings scale 1:100 (or 1/8" = 1'-0") or other (site plan/ floor plans / 1-2 sections / 2 elevations), a presentation quality site and building model (physical), A wall section and / or other forms of technical representation
3. A one page graphic outline describing all of the work to be presented in May
4. Booklet submission to the server
5. 300 word synopsis that discusses the selected subject, the hypothetical proposition and means of testing - relative to the final project

## Dialogue 3

### Final Review / Exhibition

40 - 60 minute presentation/demonstration/discussion

Key components of the presentation:

1. Final orthographic drawings (site plan/ all floor plans / sections / elevations)
2. Site / building massing model
3. Presentation quality detailed building model(s)
4. A detailed wall section and / or other forms of technical representation
5. Interior / exterior perspective views
6. 300 word synopsis that discusses the selected subject, the hypothetical proposition and means of testing - relative to the final project
7. Project Book\_ Printed

## Note:

Requirements above will vary according to thesis topic.

## Studio

Each student is to maintain a desk in the studio where the majority of work is to be completed. It is highly encouraged that students use a balance of (media freehand, analog, and digital drawings, as well as analog and digital model making) in the design process. Students are expected to have new

work each week that is responsive to the discussions of the previous studio or review. M/W meetings will be conducted through individual discussions and group reviews.

**Attendance** The studio will meet Monday + Wednesday from 1.30-5:30 pm. Attendance at presentations is required. Students meet with studio critics weekly to discuss progress. As stated above, substantial new work is expected each week. If progress has not been shown through a recognizable amount of modeling, drawing or other media it will be considered an absence for the week. After two absences (any two weeks, not consecutive) – of little or no progress a grade reduction will occur or in the case of three absences failure of the studio may result.

**Systems** Students that have not taken 48415 Advanced Building Systems must register for the course and meet course requirements.

### Grading Criteria

**A** Superlative or exemplary work and initiative. Student shows a significant understanding and clarity in a solution through visual, written and verbal means. Attended by an attitude of self-motivated exploration, open-mindedness, risk-taking, and a willingness to benefit from criticism.

**B** A thorough understanding of the initial proposal and the solution. The proposal/ solution displays significant resolution and is well presented through visual, written and verbal means. Shows competence and mastery of skills. Attended by an open, inquisitive attitude.

**C** Satisfactory or adequate work that meets the requirements of the proposal and studio. Shows understanding of the proposal, with limited deficiencies. Shows reasonable mastery of skills gained in this and prior studios. This grade is seen to represent an average solution.

**D** Passing work that minimally meets the requirements of the proposal and studio. Shows understanding of the proposal, with noticeable deficiencies. Shows reasonable use of skills gained in this and prior studios. This grade is seen to represent a below average solution.

**R** Failing work that does not meet the requirements of the proposal or course and shows a serious deficiency in skills or is incomplete. Work that is attended with low self-motivation.

Grades will be issued at midterm and the end of the semester with input from all three instructors. Grades of “Incomplete” are granted only for conditions stated in both the School and University Handbooks.

Presenting at each of the scheduled reviews is mandatory.

**Standards** Students at Carnegie Mellon University are engaged in preparation for professional activity of the highest standards. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offenses under the University Policy on Cheating and Plagiarism and disciplinary procedures. Violations may lead to suspension from the University. For further information: <http://www.cmu.edu/policies/documents/AcadRegs.html>

**Special Needs** Students with any documented medical, psychological, or learning condition that requires special room accommodations should see the instructors as soon as possible so we can make the appropriate arrangements. In the event of any emergency or other special situation, please contact the instructors as soon as possible so we can make arrangements with respect to studio.