



DREXEL UNIVERSITY

Antoinette Westphal

College of Media Arts & Design

Architecture + Interiors

# **GUIDELINES FOR ARCHITECTURE THESIS PROJECTS 2013-14**

COURSE DESCRIPTION

THESIS PROPOSAL

THESIS PROGRAM

THESIS ADVISOR

GRADING

NAAB CRITERIA

ACADEMIC INTEGRITY POLICY

SCHEDULE

BIBLIOGRAPHY/RESOURCES

# COURSE DESCRIPTION

**Course Prefix & Number:** ARCH 496/ARCH 497/ARCH 498  
**Course Title:** **Thesis I, Thesis II & Thesis III**  
**Term:** Fall 2013/Winter 2014/Spring 2014  
**Quarter Credit Hours:** 8 cr/quarter  
**Time:** Mondays, 6pm – 10 pm and as announced by Thesis Advisor.  
**Location:** 3<sup>rd</sup> and 4<sup>th</sup> Floor Architecture Studios, 3501 Market Street  
**Prerequisites:** ARCH 363 Studio 6-3, min. grade D,  
ARCH 143, ARCH 134 or ARCH 153, ARCH 263, CIVE 263,  
all min. Grade C-  
**Co-requisites:** None.  
**Curriculum Category:** Design  
**Instructor(s):** Rachel Schade (Thesis Coordinator) [schadesr@drexel.edu](mailto:schadesr@drexel.edu)

**Course Description:** **Catalog Description**  
An individually structured yearlong design problem that enables students to work independently and explore complex issues in depth. Periodic individual review sessions are scheduled with faculty adviser.

**Student Performance Criteria:** **NAAB (National Accreditation Board) Conditions for Accreditation & Student Performance Criteria:** This course addresses student performance criteria required for professional accreditation of this architecture program. These criteria consist of specified abilities and understandings that graduating students must demonstrate. The following criteria are covered in this course:

- |                                 |                                      |
|---------------------------------|--------------------------------------|
| A1. Communication Skills        | B4. Site Design                      |
| A2. Design Thinking Skills      | B5. Life Safety                      |
| A3. Visual Communication Skills | B8. Environmental Systems            |
| A4. Technical Documentation     | B9. Structural Systems               |
| A5. Investigative Skills        | B10. Building Envelope Systems       |
| A7. Use of Precedents           | B11. Building Service Systems        |
| A8. Ordering Systems Skills     | B.12 Building Materials & Assemblies |
| B1. Pre-Design                  |                                      |
| B2. Accessibility               |                                      |
| B3. Sustainability              |                                      |

The 2009 NAAB Conditions for Accreditation can be found on the NAAB website at <http://www.naab.org/>. The descriptions of the Student Performance Criteria, listed on all course syllabi, can be found in this document.

## 2013-2014 THESIS PROPOSAL

The purpose of *Thesis* is to allow the student to pursue an independent line of study for an extended period in considerable depth bringing together various skills from studio and classroom, which have been acquired over the prior course of study. It is an in-depth study of a topic of interest to the student. *Thesis* is also a comprehensive summary of what has been learned to date, so technical competence must be exhibited in all aspects of a thesis project. A thesis project will not only be judged on the quality of work presented, but also on the processes used to produce it.

A *Thesis* should include research, program analysis and development, site analysis and selection, preliminary and schematic building design as its basic scope. The expected effort must be commensurate with the time commitment - a yearlong project (24 credits) - and the level of expertise required of a thesis student. The acceptability of a thesis proposal will be partly determined by the level of investigation required. In a large and complex project, for example, all of the items above might not be included in the program. In a relatively simple project, however, detailed investigations in all the above categories would be expected.

In general, the project should be larger than a single-family house. Modest projects, similar to programs attempted in Studio 2 or 3, for example, must include investigations at fall, winter and spring reviews that go well beyond those contained in a basic architectural presentation of plans, sections, and elevations.

A thesis project, which concentrates on issues of large-scale development, must include architectural content that demonstrates the relationship of the project to built form. The clarity of the problem statement, the relative complexity of the problem, and a judgment of the ability of the student to deal with the problem will determine acceptability. Projects which are poorly defined or which are too open-ended to permit the clear understanding of the limits of the problem will not be accepted. The appropriate architectural content for a large-scale thesis project will be determined in discussion with the student's thesis advisor during the initial meeting prior to the first night of class.

All thesis projects must demonstrate the ability to independently conduct research and design investigation, create architectural form and resolve relevant issues of site, structure and construction. New construction should form the basis of a thesis project. Issues of renovation and restoration may be included only as a secondary theme. Incorporating innovation in architectural technology and energy efficiency is encouraged.

## OTHER CONSIDERATIONS

The project selected should not be a real commission for the student, or have the clear potential of becoming one. Although it usually takes the form of a real project, *Thesis* is an academic exercise and students must follow academic advice in reaching an acceptable and successful result. The proposed *Thesis* may not be a project, which is currently being undertaken in the student's office or any other office. It is possible, however, to "redo" a recent project that the student feels strongly could have been done better. In any case, the student is responsible for independent programming as a significant component of the *Thesis*.

The thesis proposal is meant to be a brief document (**two pages maximum, vertically oriented**), and must follow the outline on the next page.

The proposal should be emailed as an attachment to [architecture@drexel.edu](mailto:architecture@drexel.edu), as a PDF labeled with your last name – “2013\_2014 Smith Thesis Proposal.”

The thesis advisors will review proposal submissions. Approximately four weeks after the submission due date students can expect to be contacted through your **Drexel email** by their assigned thesis advisor who will report that your proposal has been either *approved, rejected, or needs revision or clarification*. A rejection or a request for revision or clarification will be explained by the thesis advisor along with a timetable for resubmission. When the proposal is approved the student begins the preparation of the thesis program with the advice of their thesis advisor.

### **PROPOSAL DEADLINE: MONDAY, 1 JULY 2013**

For students not taking the programming class (ARCH 431) by fall 2013, one of the following books (all available at Hagerty Library) is required reading.

- Cherry, Edith. Programming for Design: From Theory to Practice, 2008, Wiley
- Groat, Linda and David Wang. Architectural Research Methods 2002, Wiley
- Pena, W. M. and Parshall, Steven. Problem Seeking: An Architectural Programming Primer, Fifth Edition, New York:, Wiley, 2012
- Duerk, Donna. Architectural Programming: Information Management for Design. New York: Wiley, 1993.

Contact Rachel Schade, Thesis Coordinator ([schadesr@drexel.edu](mailto:schadesr@drexel.edu)) with questions.

# THESIS PROPOSAL OUTLINE

Student Name and Drexel ID number

Drexel Email address

Date

1. Title of Thesis  
Subtitle phrase (Referring to conceptual goal, site, and program)
2. Thesis Statement
  - a. Issues, concepts, questions, described in abstract terms
  - b. Discuss methods and types of inquiry to be employed
  - c. Terms of criticism (how is the project to be judged?)
3. Program
  - a. What inspired the selection of this project? How will the thesis project support the thesis statement?
  - b. List major program activities and uses
4. Site
  - a. How was the site selected? How does selected of the site support conceptual ideas for the project?
  - b. Describe physical aspects of the site and the context
5. Technology
  - a. Discuss issues that will be explored in the integration of building systems with the design project.
  - b. Can specific technologies be a means to understand the thesis issues and concepts? How will these issues be relevant to the thesis statement?
  - c. Discuss methods and means of inquiry relevant to exploration of these technologies.
6. Context
  - a. Define the context of the site; including some or all of the following: cultural economic historical political social
  - b. How does the thesis project fit into existing culture(s)? What other disciplines will be explored to gain a better understanding of the issues?
  - c. How does the Thesis fit into the larger issue of Architecture in today's society?
7. Resources
  - a. Identify a minimum of three sources, including non-architectural research to support the thesis
  - b. Inspiration—list a minimum of three projects that will influence the approach to the thesis project
8. Biographical Information  
Provide information about your current employment status and what other coursework you intend to pursue during the thesis year.

DUE MONDAY, 1 JULY 2013

**TWO PAGE MAXIMUM**

Save as a PDF file labeled “2012-2013 SMITH Thesis Proposal” and send to [architecture@drexel.edu](mailto:architecture@drexel.edu)

# THESIS PROGRAM

The program must include original preliminary research dealing with the thesis idea, case studies and the site, an assembled bibliography of your reading in support of your research, a detailed work schedule by quarter, and a detailed statement of the work to be presented at both Intermediate and final reviews. The statement of work to be completed can be amended during the course of the thesis in discussions with the thesis advisor. Nevertheless, this statement of presentation requirements should be considered a contract that defines the thesis. It becomes a measure of completeness for the thesis advisor and jury to follow. In summary the Thesis Program must include:

## DETAILED DESCRIPTION OF PROJECT

- Assumptions/thesis proposal/ideas
- Site selection (This should be complete by the time the program is submitted to allow time to collect the necessary background information)
- Existing regulatory restrictions (zoning, building code, historical, environmental, accessibility)
- Environmental impact (energy sources, sustainable practices)
- Existing topography, watershed, vegetation, wildlife, historical context, climate
- Surrounding land-use
- Access: transportation/parking
- Description of user/client
- Space requirements (use, sizes and adjacencies)
- Precedent/case studies (four, minimum)
- Proposed work schedule for each Quarter with significant milestones indicated

## DRAFT SUBMISSION

The draft program submitted to your thesis advisor in August in digital form should demonstrate a start, at least, on all the subject headings listed above.

## FINAL SUBMISSION

Two printed copies of the final program should be prepared. By the required deadline one printed copy in a loose-leaf binder should be submitted to the thesis advisor directly, and one copy should be retained by the student in a loose-leaf binder. The program submission should meet professional standards in format and appearance. It must be prepared in an 8 1/2" x 11" format. Along with the printed copy of the program submitted to the Architecture Program a digital copy is to be uploaded to the course Drexel Learn 9 site. Please note that both versions must be received to meet the submittal requirement.

## RESEARCH REQUIREMENTS

In architectural schools "thesis" assumes an investigation of architectural principles and the testing of them in the form of a design exercise. The process assumes that the students will research the critical principles that surround their topic and the characteristics of the selected building type as well. This research should form part of the summer programming phase, and will continue throughout the year. Your research should cover the thesis idea, case studies, site analysis, along with a complete bibliography of the sources you have consulted and intend to consult during the thesis year.

Writing assistance is available to all students through the Drexel Writing Center. Go to <http://drexel.edu/engphil/about/DrexelWritingCenter/> to schedule an in-person or online appointments.

The results of the research should be presented in graphic form at the fall group review, and at the intermediate and final reviews. The student's copy of the program, in a loose-leaf binder, should be brought to each meeting with the thesis advisor.

## THESIS ADVISOR

A member of the Drexel faculty will serve as your advisors for fall, winter and spring semesters. Each advisor has 3 – 6 thesis students.

## MEETING WITH THE ADVISOR

All students will meet with their thesis advisor on Monday evenings in their designated spaces at the URBN Center. A fall group review is scheduled in November when students from two sections will present their work to each other. As in previous architecture studios, attendance at crit sessions with assigned work is critical to the learning process. Two absences during the course of the year is cause for a probationary warning and can result in the reduction of grade. Missed sessions for any reason can be made up only at the discretion and convenience of the thesis advisor. The schedule for the year is set at the first class meeting in September.

## WRITTEN FEEDBACK

The thesis advisor will provide written feedback to the student following the fall group review, and the Intermediate review, as well as provide a summary of comments by jurors.

## COMMUNICATION

Communication with thesis students ~~during the thesis year~~ will be conducted entirely by email, *using the students' Drexel email address*. It is the obligation of all students to be sure their Drexel account is active, to check their Drexel email account regularly, or to link them to their primary account.

## SCHEDULING MONDAY COURSES IN CONFLICT WITH THESIS

In prior years, a student was able to take a Monday class in order to graduate at the end of the thesis year. **This is no longer an option** as all students and Advisors are required to be in class from 6-10PM every Monday evening.

## GRADING

### REVIEWS

The intermediate review occurs in at the end of the fall quarter. A formal presentation of all work to date is expected. The jury will be composed entirely of members of the faculty plus invited alumni. Members of the same jury will review both Intermediate and final presentations. After the intermediate review, the jury can make three recommendations:

- (1) Proceed to the final review;
- (2) Proceed to the final review with reservations; Additional sessions will be scheduled with the thesis advisors
- (3) Do not proceed; the student must withdraw from thesis and start a completely new topic by submitting a new proposal in the following year.

Having been cleared to present at the final review does not guarantee successful completion of the thesis. Students who receive a failing grade at the final review must also attempt a completely new project in the following year. Students who withdraw from the thesis at any point for any reason must also attempt a completely new project with a new thesis advisor. They must register and pay for all 3 quarters of thesis, even if they received a passing grade for Thesis I and Thesis II. All three thesis studios must be retaken to demonstrate a general improvement before continuing in the program. (Grades earned in retaken studios will replace previous grades for the purposes of calculating studio averages only. All grades remain on the transcript and are part of overall GPA calculation.) Students who fail a second time to meet the minimum studio requirements will be dropped from the architecture major and advised to select another degree program.

### GRADES

The content on which the grades will be based will be the following:

Fall quarter - The program (15%), research, initial design studies, and the intermediate review.

Winter quarter - Stewardson Competition (15% of Winter grade), technical investigation, schematic development, and the technical review  
Spring quarter – Design development, final review

Grades for fall quarter will be awarded after the Intermediate Review. The winter grade is awarded following the technical review at the end of the winter quarter. Spring quarter grades will be awarded after the final jury.

To complete the thesis successfully a student must receive a passing grade in each quarter. A passing grade of C- is necessary in the fall quarter to proceed to the final. Therefore, an incomplete grade for the fall quarter must be cleared within two weeks of the intermediate review or the student cannot go forward. Students who abandon or fail the thesis must register and pay tuition for all quarters of the second attempt even if the intermediate review and the fall quarter might have been passed successfully in the first attempt. They must also propose a new topic to undertake for which they will be assigned a new advisor to guide them.

#### THE STEWARDSON COMPETITION

The Stewardson Competition is open to all senior students in accredited architecture schools in Pennsylvania. The winner receives a generous stipend for extended foreign travel. Since this design exercise has significant academic value, completing it is a requirement of the thesis year, and a component of the winter quarter grade. This 10-day design competition will be scheduled in the winter quarter, after the intermediate reviews, where it serves as a change of pace for the thesis class.

#### THE MICHAEL PEARSON PRIZE

The Michael Pearson Architecture Prizes honor Michael Pearson, a 1988 architecture graduate, whose life so full of promise was tragically cut short in 1989. The Michael Pearson Prizes are presented annually to the architecture students "who produce the best thesis projects, and who, in the course of the thesis year, show exceptional spirit in pursuing the work." The winner receives a gold medal and a stipend for extended travel in the study of architecture. Second and third prize winners receive medals.

Award:	Winner:	Gold Medal & travel stipend
	2nd Place:	Silver Medal
	3rd Place:	Bronze Medal

## ACADEMIC INTEGRITY POLICY

The pursuit of a professional degree in Interiors or Architecture brings with it the demand for integrity, for integrity is at the heart of professional practice. Your commitment to integrity begins here at Drexel University and the work that is required of you. The personal commitment that you make to uphold this policy not only preserves the integrity of the degree you will earn, but also honors the professions you will serve. Thus it is vitally important that you understand and adhere to both the letter and the spirit of the Department of Architecture + Interiors Academic Integrity Policy.

The following is to help clarify what constitutes a violation of the Academic Integrity Policy:

- Copying another student's answers or use of cheat sheets, electronic resources, etc during an exam.
- Submission of a copy or modified version of a project prepared for another class without explicit permission of the instructor.
- Assistance with the fabrication of a project including but not limited to the preparation of models or drawings unless approved by the instructor.
- Copying of another person's designs, compositions, data, research, writings, printed material, electronic material or original ideas without proper acknowledgement is plagiarism. This includes even the use of parts or fragments of someone else's work or ideas.

**You must never present someone else's work as your own.**

It is your responsibility to educate yourself on what constitutes plagiarism and acceptable academic practices. Drexel University's Library website offers a useful tutorial on the issues at:

<http://www.library.drexel.edu/tutorials/plagiarism/plagiarism.html>

Any student found violating this policy will receive, at minimum, an "F" for the assignment in question, be reported to the Office of Student Conduct and Community Standards, and be subjected to University discipline. A second violation of the Academic Integrity Policy can result in expulsion or suspension, which is standard University policy. The University's procedures for dealing with accusations of academic dishonesty can be found at: <http://www.drexel.edu/studentlife/judicial/honesty.htm> and [http://www.drexel.edu/provost/policies/academic\\_dishonesty.asp](http://www.drexel.edu/provost/policies/academic_dishonesty.asp)

## OTHER UNIVERSITY POLICIES

Students with Disability Statement:

<http://www.drexel.edu/oed/disabilityResources/students/>

Dropping a Course: [http://www.drexel.edu/provost/policies/course\\_drop.asp](http://www.drexel.edu/provost/policies/course_drop.asp)

Withdrawing from a course:

[http://www.drexel.edu/provost/policies/course\\_withdrawal\\_policy.asp](http://www.drexel.edu/provost/policies/course_withdrawal_policy.asp)

## SCHEDULE FOR 2013-14 THESIS YEAR

<b>Thesis Proposal due:</b> <i>1 digital copy to the Architecture Program office mail address <a href="mailto:architecture@drexel.edu">architecture@drexel.edu</a></i>	Monday, July 1, 2013, 9:00AM
Response from thesis advisor	By Thursday, July 18, 2013
<b>Draft Program due:</b> <i>1 digital copy to thesis advisor</i>	Monday, August 19, 2013 4:00PM
<b>Program due:</b> <i>1 digital copy to thesis advisor + 1 hard bound copy 1 loose-leaf copy to be retained by student</i>	Monday, Sept. 16, 2013 4:00 PM
First class meeting	Monday, September 23, 2013, 6:00PM
<b>Fall Group Review</b>	Monday, October 28, 2013, 6:00PM
<b>Intermediate Review</b> <i>Upload presentation to Drexel Learn 9 Grade will not be awarded until upload is received</i>	Saturday, December 14, 2013, 9AM – 4PM Monday, December 16, 2013, 4:00PM
First class winter quarter	Monday, January 6, 2014, 6PM
Stewardson Competition (issued online)	Thursday, January 9, 2014, 6:00 PM
Stewardson Competition due: <i>Martin Luther King Day</i>	Monday, January 20, 2014, 6:00 PM
<b>Technical Review</b> <i>Upload presentation to Drexel Learn 9 Grade will not be awarded until upload is received</i>	Monday March 17, 2014, 6:00PM Thursday, March 20, 2014, 4:00PM
<b>Final Review</b> <i>Upload presentation materials to Drexel Learn 9 Grade will not be awarded until upload is received</i>	Saturday, May 17, 2014, 9AM – 4PM Monday, May 26, 2013, 4:00PM
Pre-Commencement Reception & Commencement	Saturday, June 14, 2014, time TBA

## BIBLIOGRAPHY/RESOURCES

**One of the following is required reading: They are on reserve at the Hagerty Library.**

\* Cherry, Edith. *Programming for Design: From Theory to Practice*. New York: John Wiley, 2008.

Groat, Linda N, Wang, David. *Architectural Research Methods*. New York: J. Wiley, 2002.

\*Peña, William, Parshall, Steven. *Problem Seeking: An Architectural Programming Primer*. Hoboken, N.J: John Wiley & Sons, 2012.

**The following books are required:**

Allen, Edward, and Iano, Joseph *The Architect's Studio Companion*. Wiley, 2006

Kwok, Alison. *Green Studio Handbook: Environmental Strategies for Schematic Design*. Oxford: Architectural Press, 2011.

**The following resources are highly recommended:**

\* Alexander, Christopher. *The Timeless Way of Building*. Oxford University Press, 1969.

\* Alexander, Christopher. *A Pattern Language*. Oxford University Press. 1977.

Brown, Denise Scott *Having Words*, 2011 AA Press

Clark, Roger and Michael Pause *Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partis*, 2004 Wiley

Ching, Francis D.K., *Architecture: Form, Space, and Order*, 2007, Wiley

\* Duerk, Donna. *Architectural Programming: Information Management for Design*. New York: John Wiley and Sons, 1993.

Farrelly, Lorraine *Construction & Materiality*, 2009, AVA Publishing

Farrelly, Lorraine *Representational Techniques*, 2008, AVA Publishing

Goldberg, Paul *Why Architecture Matters*, 2009, Yale University Press

Harbeson, John, with Introduction by John Blatteau and Sandra Tatman, *The Study of Architectural Design*. 2008 W. W. Norton

\* Kumlin, R. *Architectural Programming: Creative Techniques for Design Professionals*. New York: McGraw-Hill. 1995.

\* Lang, J., Burnette, C., Moleski, W. and Vachon, D., editors. *Designing for Human Behavior: Architecture and the Behavioral Sciences*. Dowden, Hutchinson and Ross, 1974

Langdon, Philip *A Better Place to Live; Reshaping the American Suburb* 1994 U Mass Press

\* Moleski, Walter. *Guidelines for Programming*, ERG/Environmental Research Group, 1996 (electronic reserve)

\* Palmer, M. *The Architect's Guide to Facility Programming*. Architectural Records Books, 1981.

\* Preiser, W.F.E. *Facility Programming*, New York: Van Nostrand Reinhold, 1978.

\* Preiser, W.F.E., Rabonowitz, H. and White, E. *Post-Occupancy Evaluation*. New York: Van Nostrand Reinhold, 1988

Sandaker, Bjorn S. et al, *The Structural Basis of Architecture*, 2011 Routledge

- \* Sommer, R. Personal Space: The Behavioral Basis of Design. Englewood Cliffs, NJ: Prentice Hall, 1974
- Thiis-Evanson, Thomas Archetypes of Urbanism: A Method for the Esthetic Design of Cities, 1992 Universitetsforlaget AS
- \* White, E. Introduction to Architectural Programming, Tucson, AZ: Architectural Media, 1972.
- \* Zeisel, J. Inquiry by Design, Monterey, CA: Brooks/Cole, 1981.
  
- \* Indicates text used in Architectural Programming course