

Architecture, Design & Urbanism

ARCH 493/ARCH 494/ ARCH 495 ARCH 496/ARCH 497/ARCH 498

Course Prefix & Number:

Course Title: Senior Project I, Senior Project II, Senior Project III

Thesis I, Thesis II & Thesis III

Term: Fall 2017/Winter 2018/Spring 2018

Quarter Credit Hours: 4 (minimum) or 8 (maximum) cr/quarter or as arranged through

Architecture Program

Time: Mondays, 6pm – 10 pm and as announced by Thesis/Senior

Project Advisor

Location: 3rd and 4th Floor Architecture Studios, URBN Center, 3501

Market Street (see assigned rooms below)

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 Studio

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Course information and assignments will be posted on the course website which is accessible through Drexel Learn. Students are expected to check the course website

regularly for updates and supplements to in-class presentations. Everyone in this course is required to use his or her Drexel email address for all course communications.

Course Description:

A 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.

Course Goals & Objectives:

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 programming phase, and will continue throughout the year.

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:

Primary

A. 3 Investigative Skills

B. 1 Pre-Design

C. 1 Research

Secondary

A. 1 Professional Communication Skills

A. 6 Use of Precedents

B. 2 Site Design

B. 3 Codes and Regulations

D.1 Stakeholder Roles in Architecture

The 2014 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.

Required Textbooks & Learning Resources:

Allen, Edward, and Iano, Joseph *The Architect's Studio Companion*. 5th Edition Wiley, 2011

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

Required & Supplemental Materials and Technology:

Personal Computer, Adobe Creative Cloud, AutoCAD, Revit, SketchUp, Microsoft Office Suite

Graded Assignments & Learning Activities/Grading Matrix:

Course grades will be determined as follows:

REVIEWS

The Intermediate Review occurs in December, at the end of the Fall Quarter. A formal presentation of all work to date is expected. The jury will be composed of members of the faculty plus invited alumni and guests. To the greatest extent possible, 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/Senior Project Advisors
- (3) Do Not Proceed; the student must withdraw from Thesis/Senior Project 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/Senior Project. 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/Senior Project at any point for any reason must also attempt a completely new project with a new Thesis/Senior Project Advisor. They must register and pay for all three (3) quarters of Thesis/Senior Project, even if they received a passing grade for Thesis I/Senior Project I and Thesis II/Senior Project II. All three Thesis/Senior Project 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.) 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:

<u>Fall Quarter</u> - The program (15%), research, initial design studies, and the Intermediate Review.

<u>Winter Quarter</u> - Stewardson Competition¹ (15% of Winter grade), technical investigation, schematic development, and the Technical Review

Spring Quarter – Design Development, Final 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.

WRITTEN FEEDBACK

The 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.

Successful class participation requires timeliness in arrival to class, active engagement and contribution to group discussions, maximum usage of in-class work time, and being prepared for class.

Late work may result in one interval reduction (i.e. A to B) in the assignment grade for each day beyond the due date indicated on the assignment handout.

Grading Scale:

| Excellent | | Good | | Adequate | | Poor | | Insufficient | |
|-----------|------|------|------|----------|------|------|------|--------------|---|
| A+ | 4.0 | B+ | 3.33 | C+ | 2.33 | D+ | 1.33 | F | 0 |
| Α | 4.0 | В | 3.00 | С | 2.00 | D | 1.00 | | |
| A- | 3.67 | B- | 2.67 | C- | 1.67 | | | | |

Attendance:

Regular class attendance is mandatory except in the event of an emergency or sickness. Unexcused lateness to or departure early from class will be recorded and two of these marks will be equivalent to one unexcused absence. Two unexcused absences during the quarter will result in the reduction of one grade unless special circumstances suggest consideration by the instructor.

In the event of an absence, it is the student's responsibility to stay informed of assignments in order to keep up with the class work. Showing up for class without work may be counted as an absence.

¹ If a student is *not* participating in the Stewardson Competition, 15% of their grade will indicate the progress made during the period between the review at the end of the Fall quarter and 1/22/2018.

Studio Culture Policy:

Please visit the following web link for a full description of the Architecture Studio Culture at Drexel University. The <u>Studio</u> <u>Culture Policy</u> is on the Department website.

Class & Studio Decorum:

The University provides the studio, critique alcoves and other facilities for the students use. It is each student's responsibility to keep these spaces clean and undamaged. Some simple rules will keep these areas in good condition:

- Cell phone use is not permitted in class.
- There is to be no cutting on drafting or alcove tables.
 Cutting is only allowed on self-sealing cutting surfaces.
- There is to be no use of spray adhesive or spray paint in the studio or work areas.
- Students are to return resources in the proper locations or in the assigned areas.
- Students are to clean up classroom and work areas after use.

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 <u>Drexel University Academic Integrity Policy</u>. The following is to help clarify what constitutes a violation of the Academic Integrity Policy:

- 1. 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.
- 3. Assistance with the fabrication of a project including but not limited to the preparation of models or drawings unless approved by the instructor.
- 4. 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: https://prezi.com/n003fyltxeq7/academic-integrity/?utm_campaign=share&utm_medium=copy

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/community_standards/over_view/

Other Academic Policies:

Students with disabilities requesting accommodations and services at Drexel University need to present a current accommodation verification letter (AWL) to faculty before accommodations can be made. The Office of Disability Services (ODS) issues these letters. For more information please visit their office at 3201 Arch Street, Suite 210, phone: 215-895-1401 or see their website at

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

Dropping a Course:

http://www.drexel.edu/provost/policies/course_drop.asp

Withdrawing from a course:

http://drexel.edu/drexelcentral/registration/courses/coursewithdraw/

The course instructor has the discretion to alter or augment course content or assignments during the term. Students will be notified of any course changes via Drexel Blackboard Learn.

The purpose of Thesis/Senior Project is to allow the student to pursue a line of study for an extended period in considerable depth bringing together various skills from studio and classroom that have been acquired over the previous years of study. It is an in-depth study where the topic of investigation is either developed by the student or in collaboration with a faculty member. In both cases the student is expected to work in close consultation with their Thesis/Senior Project Advisor. The Thesis/Senior Project is also a comprehensive summary of what has been learned to date, so technical competence must be exhibited in all aspects of a Thesis/Senior Project. Thesis/Senior Projects will not only be judged on the quality of work presented, but also on the processes used to produce it.

The successful Thesis/Senior Project includes research, program analysis and development, site analysis and selection, preliminary, schematic building design, and systems integration. The expected effort must be commensurate with the time commitment - a yearlong project - and the level of expertise required of a Thesis/Senior Project student.

Thesis/Senior Project Proposal

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 both Intermediate and Final Reviews that go well beyond those contained in a basic architectural presentation of plans, sections, elevations and three-dimensional representation.

A Thesis/Senior Project which concentrates on issues of large-scale development must include architectural content that demonstrates the relationship of the project to idea, context and 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 regarding the scale of each project will be determined in discussion with the student's Advisor.

All Thesis/Senior Projects must demonstrate the ability to conduct research and design investigations, create appropriate and meaningful architectural form, and resolve relevant issues of site, structure and construction. New construction should form the basis of a Thesis/Senior Project. Issues of renovation can be included only as a secondary theme.

OTHER CONSIDERATIONS

The Thesis/Senior Project selected cannot be a real commission for the student, the firm they may be working for or have the clear potential of becoming one. Although it usually takes the form of a real project, the Thesis/Senior Project is an academic exercise and students must follow academic advice in reaching an acceptable and successful result. 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 thinking, conceptualizing and programming as a significant component of the Thesis/Senior Project.

The Stewardson Competition is open to senior students in accredited architecture schools in Pennsylvania, and to graduates of PA schools within three years of completing their accredited degree. The winner receives a \$10,000 for extended foreign travel. This 10-day design competition is scheduled in the Winter Quarter, after the Intermediate Reviews for selected students identified following the Fall Quarter reviews. Participation is optional, but HIGHLY RECOMMENDED. Unless specifically recommended by the Thesis/Senior Project Advisor, each student is encouraged to submit an entry. Students who do not participate in the Stewardson are expected to meet with their Advisor at least once prior to the Intermediate Review in January.

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. The Pearson Prizes are awarded at the Final Reviews by the vote of the faculty.

Award: Winner: Gold Medal & travel stipend

2nd Place: Silver Medal 3rd Place: Bronze Medal

Course Schedule and Assignments

Extended Bilbiography

SEE BLACKBOARD LEARN FOR COURSE SCHEDULE, CHECK FREQUENTLY FOR UPDATES

- * 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, Wilev
- * Duerk, Donna. Architectural Programming: Information

 Management for Design. New York: John Wiley and Sons,
 1993.
 - 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
 - Shijan, Lin, Open Pace, *Urban Public Landscape Design*, Hong Kong, SendPoints, 2013
- * 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