

# EVDA 580/ARST 484 STUDIO 01 DESIGN THINKING

MTW\*F, 14:00-18:00 (14:00-17:50)

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## CALENDAR DESCRIPTION

Foundation concepts in design and form making involving a sequence of progressive skill building, visual and spatial thinking and problem solving exercises.

## INTRODUCTION

Studio One Design Thinking engages multiscale design problems through an iterative design process. Design is understood as a process of consciously evolving responses to interconnected contexts, problems and opportunities. These are identified and engaged through a series of proposals that require a diverse set of processes, means of expression and systems of communication and representation.

## OBJECTIVES

1. To acquire a basic knowledge of the design process based on the relationship between critical thinking and design thinking as a means of translating complex bodies of knowledge into innovative design solutions.
2. To acquire a basic knowledge of the language of architectural space and form, and an understanding of architectural conventions in the description and exploration of space and form.
3. To acquire the knowledge to reveal intentions in architecture through the process of deconstruction and interpretation.
4. To acquire the understanding and skills to develop an analysis and interpretation of site and its related climatic, social, programmatic and other key contextual aspects as a precondition to intervention.
5. To develop individual and collaborative (interdisciplinary) skills in design process and representation.
6. To learn about and develop the ability to explore the inter-relationships between design, architecture and context.

## TEACHING APPROACH

The course is studio based and as such, students will complete a series of projects that will be reviewed within the studio and serve as a basis for class discussion. As required by the specific projects, students may be working individually or in a group setting. Overall, students will be

organized into 'crit' groups, typically working with one member of the teaching team. Projects are introduced by the entire teaching team, while design work in progress will be discussed through desk reviews.

## CONTENT: OUTLINE PROJECT DESCRIPTIONS

### Module One: Formations

1. *[Sept 11-18]* **P1 - Making: Tools & Techniques.**  
Students will work the EVDS shop staff to learn the safety and production protocols in our wood shop and laser cutting facility. Students will learn these protocols through the hands on production of a site model that will be used throughout the semester for several subsequent design exercises.
2. *[Sept 19-29]* **P2 - Precedent Analysis and Interpretation: Explorations in Architectural Intentionality**  
Students will work in teams of two and analyze and deconstruct an architectural precedent. Through a rigorous drawing and modeling process, students will explore the intentions of the precedent, and develop an analytical and interpretive framework for architectural order, space, form, and the architecture's connection to site.
3. *[Sept 29-06]* **P3A - Contexts: Landscape as Form, History and Data** *Block week [Oct 09-13]*  
Student groups discuss the fundamental aspects of a given site and come to an understanding of an overall vision of this context. Drawing and modeling is then used in translating the diverse knowledge developed from a site analysis into a comprehensive two-dimensional representation of site. Graphic strategies are utilized to explore the site as a complex, layered entity. This comprehensive site documentation is the basis for future project work.

### Module Two: Synthesis

1. *[Oct 17 – Oct 31]* **P3B – Site/Precedent Synthesis Viewing Platform**  
Students will situate the conceptual underpinnings of their selected precedent project within the contextual forces they have documented on the site. The result will be a small scale viewing pavilion situated on the site.
2. *[Nov.01- Dec 08]* **P4 – Program/Site/Concept/Process Synthesis – House**  
Students will design a house based on clients provided by their studio instructor and situated on the site of the previous projects. This project begins with the development of a spatial, conceptual and functional program followed by explorations of synthesis through tectonic, material and contextual responses. Students will develop this project through the use of sketches, models, diagrams and images at various scales. The project will be divided into a number of interim reviews focused on the following:
  - Program Development
  - Conceptual Formal Strategies
  - Plan and Section Order
  - Tectonic and Material Order
  - Final Project Resolution

## COURSE EXPECTATIONS AND MEANS OF EVALUATION

Students are expected to complete studio projects by the assigned date, pinned up and ready to start at the beginning of the scheduled class time. Students are expected to present their work to the group and to participate in class discussions. Evaluation of the studio projects forms 90% of the course grade, as outlined in the Content: Outline Course Descriptions, while a digital portfolio of the term work, handed in at the completion of the term, forms the final 10% of the student's mark. A "Fail" mark on the final studio project or a failure to submit the project portfolio will result in a "Fail" mark for the course. (A grade of C+ or lower indicates failure in a given assignment in accordance with the grading procedures of EVDS)

## PROJECT WEIGHTING

Project 01

Making: Tools and Techniques

Pass/Fail

Students are required to have a PASS in Project One to get access to the EVDS Shop. The use of the shop

is required to continue in the course. A fail in this assignment requires immediate consultation with the section instructor and head shop technician.

Project 02	Precedent Analysis	10%
Project 03A	Contexts	10%
Project 03B	Viewing Platform	25%
Project 04	House	45%
Project 05	Studio Monograph	10%

At the discretion of the instructor, assignments submitted after the deadline **may** be penalized with the loss of a grade (e.g.: A- to B+) for each day late.

### GRADING SCALE

Final grades will be reported as letter grades, with the final grade calculated according to the 4-point range.

Grade	Grade Point Value	4-Point Range	Percent	Description
A+	4.00	4.00	95-100	Outstanding - as evaluated by instructor
A	4.00	3.85-4.00	90-94.99	Excellent - superior performance showing comprehensive understanding of the subject matter
A-	3.70	3.50-3.84	85-89.99	Very good performance
B+	3.30	3.15-3.49	80-84.99	Good performance
B	3.00	2.85-3.14	75-79.99	Satisfactory performance
B-	2.70	2.50-2.84	70-74.99	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	2.15-2.49	65-69.99	All final grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.
C	2.00	1.85-2.14	60-64.99	
C-	1.70	1.50-1.84	55-59.99	

D+	1.30	1.15- 1.49	50-54.99	
D	1.00	0.50- 1.14	45-49.99	
F	0.00	0-0.49	0-44.99	

**Notes:**

- A student who receives a "C-" or lower in any one course will be required to withdraw regardless of their grade point average (GPA) unless the program recommends otherwise. If the program permits the student to retake a failed course, the second grade will replace the initial grade in the calculation of the GPA, and both grades will appear on the transcript.

**MANDATORY BUDGETARY REQUIREMENTS**

The University has approved supplemental fees for the following courses:

ARST 484/EVDA 580 - Studio I Design Thinking \$150.00

**CACB STUDENT PERFORMANCE CRITERIA**

The following CACB Student Performance Criteria will be covered in this course:

A1: Design Theories, Precedents, and Methods; A2: Design Skills; A3: Design Tools; A5: Site Context and Design; A8: Design Documentation; B1: Critical Thinking and Communication; B5: Ecological Systems

**NOTES:**

A student who receives a "C+" or lower in any one course will be required to withdraw regardless of their grade point average (GPA) unless the program recommends otherwise. If the program permits the student to retake a failed course, the second grade will replace the initial grade in the calculation of the GPA, and both grades will appear on the transcript.

Students are expected to complete all course assignments on time. There will be no final exam. Students must obtain an overall passing grade to pass this course, however, if a student fails any phase of the course worth 30% or more they will fail the course. A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded may request to have the paper re-graded. The student shall discuss the work with the instructor within **fifteen days** of being notified of the mark or of the item's return to the class. More information can be found in the Graduate Calendar:

<http://www.ucalgary.ca/pubs/calendar/grad/current/gs-o.html>

1. Written work, term assignments and other course related work may only be submitted by e-mail if prior permission to do so has been obtained from the course instructor. Submissions must come from an official University of Calgary (ucalgary) email account.
2. Academic Accommodations. Students who require an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to their Instructor or the designated contact person in EVDS, Jennifer Taillefer ([jtaillef@ucalgary.ca](mailto:jtaillef@ucalgary.ca)). Students who require an accommodation unrelated to their coursework or the requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Vice-Provost (Student Experience). For additional information on support services and accommodations for students with disabilities, visit [www.ucalgary.ca/access/](http://www.ucalgary.ca/access/)
3. Plagiarism - Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when:(a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or

presenting the work (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test),(b) parts of the work are taken from another source without reference to the original author,(c) the whole work (e.g., an essay) is copied from another source, and/or,(d) a student submits or presents work in one course which has also been submitted in another course(although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. It is recognized that clause (d) does not prevent a graduate student incorporating work previously done by him or her in a thesis. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.

4. Information regarding the Freedom of Information and Protection of Privacy Act

(<http://www.ucalgary.ca/secretariat/privacy>) and how this impacts the receipt and delivery of course material

5. Emergency Evacuation/Assembly Points (<http://www.ucalgary.ca/emergencyplan/assemblypoints>)

6. Safewalk information (<http://www.ucalgary.ca/security/safewalk>)

7. Contact Info for: Student Union (<http://www.su.ucalgary.ca/page/affordability-accessibility/contact>); Graduate Student representative( <http://www.ucalgary.ca/gsa/>) and Student Ombudsman's Office

(<http://www.su.ucalgary.ca/page/quality-education/academic-services/student-rights>)