

Studio One: Design Thinking

EVDA 580 ARST 484 H(0-8)

Teaching Team: Catherine Hamel, Barry Wylant, Jason Johnson, Marc Boutin (Course Manager)

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Tuesdays and Fridays, 14:00 – 17:50 hrs., Room PF2160 and Studio 1 Space

Introduction

Studio One Design Thinking is taught within an interdisciplinary milieu. Design is understood as a process of consciously evolving one context into another as a net contribution to our broader context. As well, design represents multiple means by which complex problems are identified, engaged, and resolved into comprehensive solutions, requiring a diversity of processes, means of expression, and systems of representation.

Module One offers a series of interconnected projects that explore architectural knowledge, the structure of an architecture and the manner in which intentions are developed in architecture. Module One also engages the understanding of a site and context as a precondition to an intervention. Projects in Module Two explore a number of themes that help structure a deeper understanding of the implications of intervening in a given context through architecture, including addressing programmatic needs, tectonic and material order, and creating intentions in architecture. Throughout the term, the definition of architecture is discussed and explored, including key aspects of making architecture such as abstraction, order, 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 crits.

Content: Outline Project Descriptions

Module One 4 weeks (30% of Final Grade, September 9 - October 9)

1. **Project 1.** (2 weeks) **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.
2. **Project 2.** (2 weeks). **Contexts: Developing a Comprehensive Understanding of the Landscape.** 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. 8 weeks (60% of Final Grade, October 19 – December 8)

3. Project 3. (1 week). The Programme: The Stage for Spatial, Functional, and Conceptual Relationships.

Students will develop a comprehensive spatial and functional programme intended for their final design project. This project will involve the interview of a fellow classmate towards understanding how they live, structured through critical enquiry, and the translation of this information into a set of spatial, programmatic, and functional relationships.

4. Project 4. (7 weeks divided into 4 related explorations). The Design of a House Design: Synthesis. Students will design a house within the site analyzed in Project 2 and utilizing a fellow classmate's Programme developed in Project 3. This project will engage the framework developed during Project 1 in exploring domestic space, the design process, spatial, formal, tectonic and material order, and the integration of architecture within the context of a site. The project is divided into 4 related studies:

1. Conceptual Definition
2. Plan and Section Order
3. Tectonic and Material Order
4. 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.

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 - 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.

Selected General References

Banham, R., *Los Angeles: The Architecture of Four Ecologies*.
Formann, R. T. T. and M. Godron, *Landscape Ecology*.
Johnson, B. R. and Hill, K., eds., *Ecology and Design: Frameworks for Learning*.
Orr, D. W., *The Nature of Design: Ecology, Culture and Human Intention*.
Yeang, K., *Ecodesign: A Manual for Ecological Design*.
Zeihner, L. C., *Ecology of Architecture*.

Mandatory Budgetary Requirements

The University has approved supplemental fees for the following courses:

ARST 484/EVDA 580 - Studio I Design Thinking	\$100.00
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CACB Student Performance Criteria

The following CACB Student Performance Criteria will be covered in this course: A3 Graphic Skills, A4 Verbal and Writing Skills, A5 Collaborative Skills, B1 Design Skills, and B3 Site Design.

Notes:

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). 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/
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>).