



**Course Number:** ARCH 408

**Course Name:** Design Thinking in the Built Environment Studio II

**Classroom:** [REDACTED]

**Instructor:** Volodymyr (Vlad) Amiot

- Email: volodymyr.amiot@ucalgary.ca
- Phone: 587.578.0560
- Office Hours and Location: By Appointment (Zoom)
- Instructor Email Policy: Please note that all course communications must occur through your @ucalgary email. I will respond to emails sent via students' @ucalgary emails within 48 hours.

### **Teaching Assistants:**

- Hosna Bahonar (hosna.bahonar1@ucalgary.ca)
- Sahil Kadiwar (sahil.kadiwar@ucalgary.ca)
- Veronica Briseño Castrejon (veronica.brisenocast@ucalgary.ca)

### **Class Dates:**

- Mandatory in-person classes: Monday / Wednesday / Friday, January 8 – April 8, 10:00 am to 10:50 am (except holidays and Reading Week)
- Mandatory final review: Wednesday, April 10, 9:00 am to 12:00 pm
- Other asynchronous assignments due, as described in the project briefs, throughout the duration of the course from January to April 2024

### **Course Description:**

This course is intended for undergraduate students, from any discipline, interested in learning about architecture, design and the built environment. It is a second foundational studio course, offering an introduction to design, design thinking, design processes and aspects of design theory, as they may be applied to the built environment, specifically buildings, cities, and landscapes. As a studio course, students will work individually, and in teams, to complete a series of experiential learning exercises that address visual communication, problem solving, and designing interventions within a context. This includes aspects of diagramming and visual communication, to identify and address, through design, aspects of the built environment. Students will be evaluated based on project submissions and a final portfolio of course projects. The course concludes with a capstone exercise targeting a design intervention for a setting in Calgary.

- Academic Calendar description: <https://www.ucalgary.ca/pubs/calendar/current/architecture.html#47122>
- Course Hours: 3 units; (0-3)

## Requisites:

See [Section 3.3.5](#) of the Academic Calendar for more information regarding School of Architecture, Planning and Landscape courses.

- Prerequisite(s): ARCH 406 or ARST 431
- Corequisite(s): none

## Course Delivery:

Given that this course is in a studio format, this course will take place synchronously in [REDACTED] (M/W/F, 10:00 to 10:50 am). Students are required to participate in the synchronous classes, as per the noted times. Students will participate asynchronously, on their own time, watch videos (as required), and to complete class assignments, projects, and exercises. If a student is unable to participate in a class session, please advise your Instructor and TA ahead of time via email. Please do this at least 24 hours ahead of the scheduled class time.

## Course Learning Outcomes:

The course learning outcomes are to:

1. Introduce design thinking and its application in design processes
2. Introduce diagramming as a means of exploring design issues and opportunities
3. Introduce aspects of design ideation and presentation skills
4. Enhance visualization and design model making skills
5. Enhance individual abilities to generate design responses
6. Introduce design approaches, theories and methods, particularly those aimed at novel social innovations within an established context.

## Learning Resources:

### READINGS

The following readings provide useful reference/learning resources and are available online via the UofC library:

1. Ching, F.D.K. *Architecture: Form, Space, and Order*. Hoboken, New Jersey: John Wiley & Sons, 2015.
2. Ching, F.D.K. *Introduction to Architecture*. Hoboken, New Jersey: John Wiley & Sons, 2013.
3. Gehl, J. *Cities for People*. Washington: Island Press, 2010.
4. *Legitimacies*. <https://mconnellfoundation.ca/report/legitimacies/>
5. Lupton, E. and J.C. Phillips. *Graphic Design: The New Basics: Second Edition, Revised and Expanded*. New York, New York: Princeton Architectural Press, 2015.
6. Lynch, K. *The Image of the City*. Cambridge, Massachusetts: The MIT Press, 1960.
7. Manzini, E., S. Walker, and B. Wylant. *Enabling Solutions for Sustainable Living: A Workshop*. Calgary, Alberta: U of C Press, 2008.
8. Nippert-Eng, Christena. *Watching Closely: A Guide to Ethnographic Observation*. Oxford: Oxford University Press, 2015.
9. Pallasmaa, Juhani. "City Sense." In *Encounters*, edited by Peter MacKeith, 142-146. Helsinki: Rakennustieto, 2005.
10. Zardini, Mirko. "A New Urban Takeover." In *Actions: What You Can Do with the City*, edited by Giovanna Borasi and Mirko Zardini, 12-17. Montreal: Canadian Centre for Architecture, SUN, 2008.
11. Zardini, Mirko. "Toward a Sensorial Urbanism." In *Sense of the City*, edited by Mirko Zardini & Giovanna Borasi, 16-27. Montreal: The Canadian Center for Architecture & Lars Müller Publishers, 2005.

## TECHNOLOGY REQUIREMENTS

- A computer with a supported operating system, as well as the latest security, and malware updates.
- A current and updated web browser
- Webcam (built-in or external)\*
- Microphone and speaker (built-in or external),\* or headset with microphone
- Current antivirus and/or firewall software enabled
- Broadband internet connection

\*Note that most current laptops have built-in webcam, speaker, and microphone.

## Special Budgetary Requirements:

Please note that students will incur the cost of project materials necessary to complete the design exercise assignments. Assignments are structured to minimize these costs; however, they are contingent upon the student's creative design work and cannot therefore be precisely anticipated. Supplies specific to each project will be noted in the project briefs, when the project is issued (see project schedule above). Additionally, the following design/drafting supplies will be needed to execute projects in the studio (some are noted as optional):

- Drawing pencils: 3H, 2H, HB, 4B, 6B
- Pencil sharpener
- Mechanical pencils and leads (either 0.5mm or 2mm) (optional)
- White drawing eraser
- Fine point drafting markers for Projects 5 and 6 (details provided when projects are issued)
- A roll of tracing paper is helpful for Projects 5 and 6
- Drawing straight edges (drafting set squares / triangles, plastic ruler, etc.)
- T-square (optional)
- Circle and elliptical templates are useful (optional and not required)
- A metric drafting scale (optional) and a metric ruler (required)
- Drafting masking tape
- Matt knife
- Cutting pad
- Hot melt glue gun
- 18" cork-backed steel ruler

## Additional Classroom Conduct and Related Information:

- **Code of Conduct:** The SAPL Studio spaces and other SAPL/University-provided facilities and equipment are governed by the [University's Student Non-Academic Misconduct Policy](#). Professional and courteous behavior is expected at all times. For more information, please refer to [Appendix 1: Prohibited Conduct](#), including the following categories: 1. Protection of Individuals; 2. Protection of Property; 3. Protection of University Functions, Activities and Services; 4. False Information and Identification; 5. Possession or Use of Dangerous Objects, Drugs or Alcohol; 6. Aiding in the Commission of an Offence; 7. Contravention of Other Laws and University Policies; and 8. Failure to Comply with a Sanction.
- Students are expected to participate actively in all sessions. Students must behave in a professional manner during the session. Students, employees, and academic staff are also expected to demonstrate behaviour in class that promotes and maintains a positive and productive learning environment.

## Assessment Components:

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the Academic Calendar. In determining the overall grade in the course, the following weights will be used:

| NO. | PROJECT                              | WEIGHT | ISSUED | DUE    | ALIGNED OUTCOME |
|-----|--------------------------------------|--------|--------|--------|-----------------|
| P1  | Diagramming Project                  | 10%    | Jan 8  | Jan 19 | 1,2             |
| P2  | Scripting Project                    | 5%     | Jan 22 | Jan 26 | 1,3             |
| P3  | Enabling Solution Project            | 20%    | Jan 29 | Feb 16 | 1,2,3,5         |
| P4  | Capstone Design Intervention Project |        |        |        | 1,2,3,4,5,6     |
|     | P4.1 Understanding Site              | 10%    | Feb 26 | Mar 4  |                 |
|     | P4.2 Concept and Prototype           | 15%    | Mar 6  | Mar 20 |                 |
|     | P4.3 Design Development              | 20%    | Mar 22 | Apr 10 |                 |
| P5  | Reflection Paper                     | 10%    | Mar 1  | Apr 15 | 6               |
| P6  | Portfolio                            | 10%    | Mar 1  | Apr 17 | 2,4             |

- Attendance and live participation for the entire duration of course assessments are mandatory (e.g., pin up review, final review, etc.) and must be completed in person unless otherwise stated. If a student is unable to participate live due to unforeseen circumstances, please inform the Course Instructor in advance. Missed assessments with a valid excuse, as defined by the University's guidelines ([Section G.2.3](#)) or with advance prior notification to the instructor, may be considered without penalty upon review of the student's attendance and participation record. Failure to be present for a course assessment as a result of an unexcused absence are grounds for failure in the course. You may be required to provide supporting documentation, as per [Section M.1](#) of the Academic Calendar to support your request.

### ATTENDANCE AND PARTICIPATION EXPECTATIONS

- Students are expected to attend and come prepared to meaningfully engage in all class sessions. This includes producing or preparing content necessary for discussion and contributing to individual and class-wide discussions and/or conversations/assessments with the Course Instructor.
- **Excused Absences:** In the event of an exceptional circumstance (e.g., illness, bereavement, etc.) or an exceptional opportunity (e.g., varsity athletic competition, national conference or awards ceremony, pow wow, etc.) up to four excused absences are allowable per semester before jeopardizing one's own course grade and ability to pass the course. However, any such accommodations must be approved by the Instructor with advance notice by the student.
- **Unexcused Absences:** Attendance at all class sessions and participation in all assessments is mandatory. Unexcused absences in excess of two per semester are grounds for failure in the course.
- **Total Number of Absences:** The combined total number of excused or unexcused absences per semester cannot exceed four per semester. Any number in excess are grounds for failure in the course.

### GUIDELINES FOR SUBMITTING ASSIGNMENTS

- All assignments (e.g., projects, papers, presentations, etc.) must be turned in on time.
- **Late Assignments:** Late assignments will lose a letter grade every 24 hours after the submission date/time. Late assignments submitted more than four days late constitute automatic failure. Late assignments with a valid excuse, as defined by the University's guidelines ([Section G.2.3](#)) or with advance prior notification to the instructor, may be considered without penalty upon review of the student's attendance and participation record. Please let your instructor know immediately if you cannot meet the deadlines specified. You may be required to provide supporting documentation, as per [Section M.1](#) of the Academic Calendar to support your request.

- Each assignment shall be submitted digitally as a PDF, uploaded to the appropriate dropbox on the course D2L site. Assignments are to be submitted on the specified due date, by the beginning of the session at 10:00 am (if due on a day where we are meeting as a class). Some assignments may require the submission of a hard copy in addition to the digital submission.

#### FINAL EXAMINATIONS

- There will be no examinations for this course.

#### EXPECTATIONS FOR WRITING

- <https://www.ucalgary.ca/pubs/calendar/current/e-2.html>
- Students are expected to write at a university level, demonstrating a highly proficient and professional use of English, proper citation methods (Chicago Style), and compliance with academic regulations to negate instances of plagiarism and academic misconduct.

#### CRITERIA THE MUST BE MET TO PASS

- Students must complete all assignments by the prescribed due dates to pass. Failure to submit any assignment will result in an automatic failing grade for the course.

#### Flexible Grade Option (CG Grade):

As per [Section 3.5.1](#) of the Academic Calendar, the School of Architecture, Planning and Landscape will not permit the Flexible Grade Option (CG Grade) for any course offered by the School.

#### Grading Scale:

| GRADE | GRADE POINT VALUE | 4-POINT RANGE | PERCENT  | DESCRIPTION   |
|-------|-------------------|---------------|----------|---|
| A+    | 4.00              | 4.00          | 95-100   | Outstanding performance   |
| A     | 4.00              | 3.85-4.00     | 90-94.99 | Excellent performance   |
| A-    | 3.70              | 3.50-3.84     | 85-89.99 | Approaching excellent performance   |
| B+    | 3.30              | 3.15-3.49     | 80-84.99 | Exceeding good performance  |
| B     | 3.00              | 2.85-3.14     | 75-79.99 | Good performance  |
| B-    | 2.70              | 2.50-2.84     | 70-74.99 | Approaching good performance  |
| C+    | 2.30              | 2.15-2.49     | 65-69.99 | Exceeding satisfactory performance  |
| C     | 2.00              | 1.85-2.14     | 60-64.99 | Satisfactory performance  |
| C-    | 1.70              | 1.50-1.84     | 55-59.99 | Approaching satisfactory performance. Minimum grade requirement for prerequisite courses. |
| D+    | 1.30              | 1.15-1.49     | 50-54.99 | Marginal pass. Insufficient preparation for subsequent courses in the same subject.       |
| D     | 1.00              | 0.50-1.14     | 45-49.99 | Minimal pass. Insufficient preparation for subsequent courses in the same subject.        |
| F     | 0.00              | 0-0.49        | 0-44.99  | Failure. Did not meet course requirements.  |

## Topic Areas and Detailed Class Schedule:

- Please note that the activities scheduled on any particular day is subject to change based on semester and project progress. Should any activities change, an updated schedule will be sent out with as much notice as possible. The schedule of assignments and their due dates will remain as presented in this document.
- Readings will be assigned through the semester in conjunction with assignment handouts.

| WEEK | DATE   | TOPIC   | ISSUED  | DUE  |
|------|--------|---|---------|------|
| 1    | Jan 8  | Course outline and introduction                                 | P1      |      |
|      | Jan 10 | P1 diagram lecture  |         |      |
|      | Jan 12 | P1 steps (words only) desk crits                                |         |      |
| 2    | Jan 15 | P1 diagrammed steps desk crits                                  |         | P1   |
|      | Jan 17 | P1 combined steps desk crits                                    |         |      |
|      | Jan 19 | P1 review   |         |      |
| 3    | Jan 22 | P2 introduction + scripting lecture                             | P2      | P2   |
|      | Jan 24 | P2 scripting crits desk crit                                    |         |      |
|      | Jan 26 | P2 review   |         |      |
| 4    | Jan 29 | P3 introduction + enabling solutions lecture                    | P3      |      |
|      | Jan 31 | P3 abundant resource desk crit                                  |         |      |
|      | Feb 2  | P3 systems mapping lecture / exercise                           |         |      |
| 5    | Feb 5  | P3 systems diagram desk crit                                    |         |      |
|      | Feb 7  | P3 systems diagram desk crit                                    |         |      |
|      | Feb 9  | P3 opportunities lecture / exercise                             |         |      |
| 6    | Feb 12 | P3 opportunities desk crit                                      |         | P3   |
|      | Feb 14 | P3 opportunities desk crit                                      |         |      |
|      | Feb 16 | P3 review   |         |      |
| 7    | Feb 19 | READING WEEK – NO CLASS   |         |      |
|      | Feb 21 | READING WEEK – NO CLASS   |         |      |
|      | Feb 23 | READING WEEK – NO CLASS   |         |      |
| 8    | Feb 26 | P4.1 introduction + observation lecture                         | P4.1    |      |
|      | Feb 28 | P4.1 observation exercise                                       | P5 + P6 |      |
|      | Mar 1  | P4.1 observation exercise desk crit                             |         |      |
| 9    | Mar 4  | P4.1 observation review   | P4.2    | P4.1 |
|      | Mar 6  | P4.2 introduction and design opportunities lecture / discussion |         |      |
|      | Mar 8  | P4.2 guest lecture  |         |      |
| 10   | Mar 11 | P4.2 concept diagrams and prototype desk crit                   |         |      |
|      | Mar 13 | P4.2 concept diagrams and prototype desk crit                   |         |      |
|      | Mar 15 | P4.2 concept diagrams and prototype desk crit                   |         |      |

|      |        |   |      |      |
|------|--------|---|------|------|
| 11   | Mar 18 | P4.2 prototype test                                       | P4.3 | P4.2 |
|      | Mar 20 | P4.2 review and discussion                                |      |      |
|      | Mar 22 | P4.3 introduction and design development discussion       |      |      |
| 12   | Mar 25 | P4.3 design desk crit                                     |      |      |
|      | Mar 27 | P4.3 design desk crit                                     |      |      |
|      | Mar 29 | GOOD FRIDAY – NO CLASS                                    |      |      |
| 13   | Apr 1  | EASTER MONDAY – NO CLASS                                  |      |      |
|      | Apr 3  | P4.3 design desk crit                                     |      |      |
|      | Apr 5  | P4.3 design desk crit                                     |      |      |
| 14   | Apr 8  | P4.3 presentation preparations and class conclusions      |      | P4.3 |
|      | Apr 10 | P4.3 final review (9:00 am – 12:00 pm, out-of-class time) |      |      |
| Post | Apr 15 |   |      | P5   |
|      | Apr 17 |   |      | P6   |

## Scheduled Out-of-Class Activities:

The following out-of-class activities are scheduled for this course:

| ACTIVITY     | LOCATION | DATE                      | TIME               | DURATION    |
|--------------|----------|---------------------------|--------------------|-------------|
| Final Review |          | Wednesday, April 10, 2024 | 9:00 am – 12:00 pm | 180 minutes |

There will be a final review of the capstone projects scheduled on Wednesday, April 10, 2024, 9:00 am – 12:00 pm. It is imperative that students attend this review with external critics. Please plan to accommodate this in your schedule.

## University of Calgary Policies and Supports:

### UNIVERSITY OF CALGARY COVID-19 UPDATES AND PROCEDURES

<https://www.ucalgary.ca/risk/emergency-management/covid-19-response/covidsafe-campus>

### ACADEMIC ACCOMMODATION

<https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations>

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: <https://www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy>

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities:

<https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf>

Students needing 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 (contact information on first page above).

[Student Accessibility Services](#) will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit [www.ucalgary.ca/access/](http://www.ucalgary.ca/access/).

## ACADEMIC MISCONDUCT

Academic Misconduct refers to student behavior which compromises proper assessment of a student's academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

For information on the Student Academic Misconduct Policy and Procedures please visit:

- Student Academic Misconduct Policy: <https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-policy>
- Student Academic Misconduct Procedure: <https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure>

Additional information is available on the Academic Integrity Website at <https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity>.

## COPYRIGHT LEGISLATION

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy>) and requirements of the Copyright Act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks, etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy (<https://www.ucalgary.ca/pubs/calendar/current/k.html>).

## INSTRUCTOR INTELLECTUAL PROPERTY

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

## FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

## SEXUAL AND GENDER-BASED VIOLENCE POLICY

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary's Sexual and Gender-Based Violence Policy guides us in how we respond to incidents of sexual and/or gender-based violence, including supports available to those who have experienced or witnessed sexual/gender-based violence, or those who are alleged to have committed sexual/gender-based violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances. Please see the policy available at <https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy>.

## **UNIVERSITY STUDENT APPEALS OFFICE**

If a student has a concern about a grade that they have received, they should refer to Section I of the Undergraduate Calendar (<https://www.ucalgary.ca/pubs/calendar/current/i-3.html>) which describes how to have a grade reappraised.

## **OTHER IMPORTANT INFORMATION**

Please visit the Registrar's website at <https://www.ucalgary.ca/registrar/registration/course-outlines> for additional important information on the following:

- Wellness and Mental Health Resources
- Student Success
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk