



UNIVERSITY OF CALGARY
SCHOOL OF ARCHITECTURE,
PLANNING AND LANDSCAPE

Winter 2023

Course Code:	ARCH 408
Course Name:	DESIGN THINKING in the BUILT ENVIRONMENT STUDIO II
Course Units	3 Units, (0-3)
Pre-Requisites:	ARCH 406 Design Thinking in the Built Environment Studio I
Classroom:	PF2151
Class Dates:	M/W/F 11:00 to 11:50am (with the exception of holidays and Reading Week). Mondays + Fridays: in-person Wednesdays: online via zoom (Instruction via zoom but TAs will be present Other asynchronous assignments due as described in the project briefs, throughout the duration of the course from January to April 2023
Instructor:	Chika Daniels-A chika.danielsakunekw@ucalgary.ca Office Hours: by appointment, via Zoom
Instruction:	Blended teaching/learning format. Mandatory synchronous in-person and synchronous online classes
Email Policy:	Please note that all course communications must occur using your @ucalgary.ca email address. I will respond to emails within 2 business days.
Teaching Assistants:	Veronica Briseno Castrejon veronica.brisenocast@ucalgary.ca Viraji Bandara virajiyasendrajayawe@ucalgary.ca Steve Kunz steven.kunz@ucalgary.ca

DESIGN THINKING

"We must design for the way people behave, not for how we would wish them to behave." – Donald A. Norman "Living with Complexity"



Sones, N. (2016). "Design thinking" explained, *Raconteur*, 1 December

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 that offers 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 interventions within an urban setting. 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 an urban setting in Calgary.

IN-PERSON CLASS FORMAT

Given that this course is in a studio format, this course will take place synchronously in PF2151 (M/W/F 11:00 to 11:50am). 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, due to unforeseen circumstances, a student is unable to participate in a class session, please advise your TA ahead of time via email, cc'ing the instructor. **Please do this at least 24 hours ahead of the scheduled class time.**

TECHNOLOGY REQUIREMENTS

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- 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.

COURSE OBJECTIVES / LEARNING OUTCOMES

- Introduce design thinking and its application in design processes
- Introduce diagramming as a means of exploring design issues and opportunities
- Introduce aspects of design ideation and presentation skills
- Enhance visualization and design model making skills
- Enhance individual abilities to generate design responses
- Introduce design approaches, theories and methods, particularly those aimed at novel social innovations within a city / urban setting.

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. Legitimacities <https://mcconnellfoundation.ca/report/legitimacities/>
5. Lupton, E. & Phillips, J.C. *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., Walker, S., Wylant, B. *Enabling Solutions for Sustainable Living: A Workshop*. Calgary, Alberta: U of C Press, 2008.
8. Pallasmaa, Juhani. "City Sense," In *Encounters*, edited by Peter MacKeith, 142-146. Helsinki: Rakennustieto, 2005.

9. Zardini, Mirko. "A New Urban Takeover," in *Actions: What You Can Do with the City*, edited by Giovanna Borasi & Mirko Zardini, 12-17. Montreal: Canadian Centre for Architecture, SUN, 2008.
10. 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.

ASSESSMENT COMPONENTS / COURSE ASSIGNMENTS

The course is evaluated based on submitted project assignments and there are six projects in total for the term:

#	%	Assignment/Exercise	Issue date	Due date
P1	10%	Diagramming Exercise	Jan 9 th	Jan 23 rd
P2	5%	Scripting Exercise	Jan 23 rd	Jan 27 th
P3	15%	Enabling Solution Exercise	Jan 30 th	Feb 15 th
P4	50%	Capstone Urban Intervention Exercise	Feb 17 th	Apr 10 th
P5	10%	Reflection paper	Feb 27 th	Apr 17 th
P6	10%	Portfolio	Feb 27 th	Apr 19 th

Attendance and Participation Expectations: Given the studio format for the course, and the project-based course work, attendance for all classes is expected. **Crucial to this is attendance for 'Crit' sessions, presenting interim studio work for discussion.**

Guidelines for Submitting Assignments: All assignments will be due in class on the noted due date. Additionally, all assignments must be submitted digitally to the designated Dropbox on D2L on the prescribed due date, in PDF format, including images of design projects, PDF presentations and papers.

Final Examinations: There is no final examination 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, and compliance with academic regulations to negate instances of plagiarism and academic misconduct.

Late Assignments: Late submission of project assignments will result in a half grade penalty, per day late. After 10 days late, the assignment will receive an 'F' grade. Note that in rare circumstances, students may seek an extension for a particular project. Students should advise their TAs as soon as the need is known, provide the reason for the extension, and most importantly, provide a **plan** as to when the project assignment

will be submitted. Students must advise their TAs at least 48 hours in advance of a given due date to be eligible for an extension, otherwise the project assignment will be graded according to the late submission protocol noted above.

Criteria that 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 "F" grade for the course.**

TOPIC AREAS AND DETAILED CLASS SCHEDULE

Week 1	Jan 9 Jan 11 Jan 13	Course Outline Diagram Lecture Steps (words only) crits	<i>P1 Issued</i>
Week 2	Jan 16 Jan 18 Jan 20	Diagrammed steps crits Combined steps crits Combined steps crits	
Week 3	Jan 23 Jan 25 Jan 27	P1 Due / P2 Scripting Lecture P2 Scripting Discussion P2 Due	<i>P2 Issued</i>
Week 4	Jan 30 Feb 01 Feb 03	P3 Enabling Solutions Lecture P3 Poster crits P3 Poster crits	<i>P3 Issued</i>
Week 5	Feb 06 Feb 08 Feb 10	P3 Diagram crits P3 Diagram crits P3 Diagram crits	
Week 6	Feb 13 Feb 15 Feb 17	P3 Poster/Diagram crits P3 Due P4 City of Calgary Project	<i>P4 Issued (Part 1)</i>
Week 7	Feb 20 Feb 22 Feb 24	FAMILY DAY NO CLASS READING DAYS NO CLASS READING DAYS NO CLASS	
Week 8	Feb 27 Mar 01 Mar 03	P4 Photo inventory crits P4 part 1 Photo inventory Due P4 precedents discussion	<i>P5, P6 Issued</i> <i>P4 Issued (Part 2)</i>
Week 9	Mar 06 Mar 08 Mar 10	Precedents/Urban Intervention lecture P4 initial ideation discussion/crits P4 initial ideation discussion/crits	

Week 10	Mar 13 Mar 15 Mar 17	P4 part 2 Precedents Due / Guest Lecture / <i>P4 Issued (Part 3)</i> P4 Ideation discussion/crits P4 Ideation discussion/crits
Week 11	Mar 20 Mar 22 Mar 24	P4 design development crits P4 design development crits P4 part 3 Program / Early Concept Due / <i>P4 Issued (Part 4)</i>
Week 12	Mar 27 Mar 29 Mar 31	P4 design development crits P4 design development crits P4 design development crits
Week 13	Apr 03 Apr 05 Apr 07	P4 design development crits P4 design development crits P4 design development crits
Week 14	Apr 10 Apr 12 Apr 14	Design development due / Last day of Class P4 Due Off-Schedule Wednesday Afternoon Reviews with City of Calgary
Post Course:	Apr 17 Apr 19	P5 Due: uploaded to D2L P6 Due: uploaded to D2L

GRADE SCALE

Final grades shall be reported as letter grades, correlating to the grade point value as per column 2 below. Final grades shall be calculated according to the 4-point range as noted in column 3. Assignments calculated by percentage grades will use the equivalent values shown in column 4.

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.
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.

- A grade of "C-" or below may not be sufficient for promotion or graduation, see specific faculty regulations.
- The number of "D" or "D+" grades acceptable for credit is subject to specific undergraduate faculty promotional policy.

GUIDELINES / CONDUCT FOR ZOOM SESSIONS

Zoom is a video conferencing program that will allow us to meet at specific times for a "live" video conference, so that we can have the opportunity to meet each other virtually and discuss relevant course topics as a learning community.

Students are expected to participate actively in all Zoom sessions and to turn on their webcam. Please join our class in a quiet space that will allow you to be fully present and engaged in the Zoom sessions. Student must behave in a professional manner during the session. Students, employees, and academic staff are expected to demonstrate behavior in class that promotes and maintains a positive and productive learning environment.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor's permission.

The use of video conferencing programs relies on participants to act ethically, honestly and with integrity; and in accordance with the principles of fairness, good faith, and respect (as per the [Code of Conduct](#)). When entering Zoom or other video conferencing sessions (such as MS Teams), you play a role in helping create an

effective, safe and respectful learning environment. Please be mindful of how your behavior in these sessions may affect others. Participants are required to use names officially associated with their UCID (legal or preferred names listed in the Student Centre) when engaging in these activities. Instructors/moderators can remove those whose names do not appear on class rosters. Non-compliance may be investigated under relevant University of Calgary conduct policies (e.g. [Student Non-Academic Misconduct Policy](#)). If participants have difficulties complying with this requirement, they should email the instructor of the class explaining why, so the instructor may consider whether to grant an exception, and on what terms. For more information on how to get the most out of your zoom sessions visit: <https://elearn.ucalgary.ca/guidelines-for-zoom/>

If you are unable to attend a Zoom session, please contact your instructor in advance to arrange an alternative activity for the missed session (e.g., to review the recorded session). Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in Zoom sessions. Students will be advised by their instructor when they are expected to turn on their webcam (for group work, presentations, etc.).

The instructor may record online Zoom class sessions for the purposes of supporting student learning in this class – such as making the recording available for review of the session or for students who miss a session. Students will be advised before the instructor initiates a recording of a Zoom session. These recordings will be used to support student learning only and will not be shared or used for any other purpose.

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) are optional
- White drawing eraser
- fine point drafting markers for projects 5 & 6 (detail will be provided when projects are issued)
- A roll of tracing paper is helpful for projects 5 & 6
- Drawing straight edges (drafting set squares a.k.a. triangles, plastic ruler, etc.)
- T-square is optional
- Circle and elliptical templates are useful, but optional and not required.
- A metric drafting scale is optional, a metric ruler is required
- Drafting masking tape

- Matt knife
- Cutting pad
- Hot melt glue gun
- 18" cork-backed steel ruler

UNIVERSITY OF CALGARY POLICIES AND SUPPORTS

COVID-19 procedure for sick students: <https://ucalgary.ca/risk/sites/default/files/Covid-19%20Folder/COVID-19-Procedure-for-Sick-Students.pdf>

Academic accommodation

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The Student Accommodations policy is available at <https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations>.

Students needing an accommodation based on disability or medical concerns should contact Student Accessibility Services (SAS) in accordance with the Procedure for Accommodations for Students with Disabilities (<https://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities.pdf>). Students who require an accommodation in relation to their coursework based on a protected ground other than Disability should communicate this need in writing to their Instructor.

SAS 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/.

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 Procedure please visit:

<https://ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf>
<https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf>

Additional information is available on the Academic Integrity Website at <https://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 (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) 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 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 violence policy guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual 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/policies/files/policies/sexual-violence-policy.pdf>

University student appeals office

If a student has a concern about the course, academic matter, or a grade that they have been assigned, they must first communicate this concern with the instructor. If the concern cannot be resolved with the instructor, the student can proceed with an academic appeal, which normally begins with the Faculty. <https://www.ucalgary.ca/secretariat/student-appeals>

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