

# ARCH 193 - DESIGN STUDIO

COURSE OUTLINE - WINTER 2022

UNIVERSITY OF WATERLOO, SCHOOL OF ARCHITECTURE

## SCHEDULE:

Mondays: 9:30 AM - 12:30 PM, 1:30 PM - 5:30 PM

Thursdays: 9:30 AM - 12:30 PM, 1:30 PM - 5:30 PM

## INSTRUCTORS:

Rick Andrighetti (he/him) (co-coordinator)

David Correa (he/him) (co-coordinator)

Jaliya Fonseka (he/him)

Sifei (Faye) Mo (she/her)

Isabel Ochoa (she/her) (co-coordinator)

## TEACHING ASSISTANTS:

Liam Bursey (he/him)

Shannon Kennelly (she/her)

Ali Sermol (she/her)

*Office hours to be posted*

*"The ability to build assumes the knowledge of all architecture and construction forms, as well as their development. To build means to advance this process, to investigate, and to make. The development of buildings began over ten thousand years ago and has reached an extremely high level, but is in no way a closed process. There are still an infinite number of open possibilities, infinite discoveries to make."*

**Frei Otto**

in A Conversation with Frei Otto, Juan Maria Songel, 2010

*"I listen to my inner ear and see what experiences I can call on to tackle a new building job....You make a start and then have to let go to find out where the material is taking you. I find it quite surprising how the images come up in my mind - sometimes its like the cinema. Its in moments like that where I am not in control that the essence of the design emerges. But also as the design progresses, it occurs that I wake up and find myself somewhere in the building and think to myself, that this wall or that door's not quite right. I don't have to do anything it just comes."*

**Peter Zumthor**

Talking Architecture, 2008 Prestel, H. Rauterberg

## TERRITORIAL ACKNOWLEDGMENT:

*We acknowledge that the School of Architecture is located on the traditional territory of the Neutral, Anishinaabe and Haudenosaunee peoples. The University is situated on the Haldimand Tract, the land promised to the Six Nations that includes 10 kilometres on each side of the Grand River.* (see references here: <https://uwaterloo.ca/engineering/about/territorial-acknowledgement>)

**INTRODUCTION - COURSE DESCRIPTION:**

In the 1A studio you developed key skills in spatial thinking and associated practices of its representation in both two and three dimensions. In this second design studio, you will continue the development of architectural design foundations, albeit in increasingly more complex contexts.

Within this studio, architecture is treated as a practice-based discipline engaged by way of a variety of activities, or operations. For us, we understand these activities as constituting the drivers of architectural production and can include a variety of undertakings including but not limited to: material and tectonic explorations, spatial experiments, site analysis and design, and program- and user-based analysis. During the term we will foreground different sets of operations and explore their distinctive capacity to generate architectural ideas and drive their associated production.

Recognizing that the development of an architectural project is shaped by the combination of activities used, you will be asked to take clear intellectual and design positions on what, why and how you design. You will be directly thinking about the strategies, methods and materials you use to help shape your ideas and forms. Along the way you will be asked to experiment, take risks, ask questions and pursue answers through design-related activities.

**COURSE OUTCOMES:** (As identified by the Canadian Architecture Certification Board, CACB)

By the end of the course students should be able to/have:

1. Ability to make a comprehensive analysis and evaluation of a building, building complex, or urban space
2. Ability to apply organizational, spatial, structural, and constructional principles to the conception and development of spaces, building elements, and tectonic components
3. Ability to respond to natural and built site characteristics in the development of a program and the design of a project
4. Ability to make technically precise descriptions and documentation of a proposed design for purposes of review and construction
5. Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well reasoned conclusions, and test them against relevant criteria and standards
6. Introductory understanding of issues of accessibility, wayfinding and barrier free design. Gain understanding of the impact spatial planning has on physical mobility and multi-sensorial perception (haptic, acoustic, temperature, smell).
7. Demonstrated understanding of human scale. This includes both the relation between proportional elements in a composition and the relation between the human body and the spaces it occupies both physically and visually.

**PROJECTS & LEARNING OBJECTIVES:**

The term will be organized around three projects – each foregrounding different drivers that can be used in the advancement of architectural ideas and production. While detailed descriptions will be presented alongside corresponding project introduction lectures, the outline for the term is as follows:

**P1: Pedestrian Bridge**

Project 1 will start with a hands-on investigation on the role that spatial sequencing, structural form and material assemblies play in the advancement of an architectural idea. Students will explore physical phenomena, and generate hypothesis about how and why these phenomena affect the perception of space. These insights will then be used to shape an expanded architectural idea.

**Learning Objectives:**

- Apply iterative design strategies as a tool for design development
- Implement formal & tectonic logic as a design driver
- Engage in the designing of systems rather than objects

**P2: Reverse Competition**

To prepare for project 3, this project will serve as a case study of the library typology. To execute this case study, students will put themselves in the mind of the project architects, developing a graphic competition proposal to communicate the key ideas of the project.

For this phase students are required to work in teams of 3 (see *Collaborative Work* section)

**Learning Objectives:**

- Gain an applied understanding of historical and contemporary approaches to library and community hub design
- Investigate diagramming & abstraction as design drivers
- Apply graphic storytelling & critically position the hierarchy of concepts

**P3: Library + Community Hub**

Building on skills developed up to this point, students will design a modern library/community hub in an urban context. Through the development of the project, students will be encouraged to incorporate environmental and structural knowledge from parallel technical courses.

**Learning Objectives:**

- Use representational tools such as, program, section, vignette, massing, and site analysis as design drivers
- Investigate the necessary spatial and atmospheric qualities that support vibrant, inclusive, and functional, community spaces
- Develop an understanding of barrier-free design principles and challenges.
- Use architectural design tools to spatially curate conflicting and diverse programmatic requirements in a small building footprint

- Apply environmental stewardship strategies informing material and tectonic approaches

**DESK CRITS:**

Studio days will generally be for scheduled “desk crits”. Students are expected to generate a significant amount of new work for these critiques. Time outside of scheduled crit times on studio days should be used for working on studio projects. These are great opportunities to produce new work, as well as share your work with your peers, and get a second opinion.

As you become familiar with 3D modeling, it is important that you continue to produce/print drawings for crits. Showing a project by flying around a model can be very disorienting and difficult to annotate. In addition to this, the act of creating a drawing will reveal design issues and opportunities not present in a model.

Due to the structure of this studio, you may see multiple instructors and TAs over the course of one project. This makes it important for you to take ownership over your ideas and motives so that they remain strong as you get feedback from different sources. The role of the instructors is to support your inquiry, not to tell you what your project is about.

**COURSE REQUIREMENTS AND ASSESSMENT:**

P1	Pedestrian Bridge:	25%
P2	Reverse Competition (Group):	15%
P3	Library + Community Space:	60%

Assessment information will be circulated with each project however, overarching tips for success include:

**Intellectual Clarity:** Enquiry and extension of the course material will be essential to producing successful explorations. Students must be able to clearly articulate their design ambitions, intellectual underpinnings and all design work in discussions, desk crits, pin-ups and presentations.

**Independent Enquiry:** Student are expected to advance their projects through self-motivated and self-framed agendas and pursuits. Projects are seen as offering students a framework through which to explore and exercise architectural skills.

**Technique:** All work must be executed with intent and care where the precision and craft of artefacts created are continuously valued.

**Attendance & Steady Progress:** Work should be developed over the entire length of a project. Iteration and incremental development are paramount.

**Completion:** Timely completion of work is expected

**The following is offered as a guide to numerical grade assignments:**


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=>90: Consistent exemplary work that exceeds expectations. Work is holistically thought provoking and executed at a very high level.
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85-89: Some elements of work are exceeding expectations and executed at a high level, but this level of achievement is not maintained throughout all project elements
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80-84: Work is consistently above average, and student is actively participating and actively engaging the course material
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77-79: Average work. Student is completing work in a timely manner and participating in the course. No attendance issues. Shows expected levels of competency in course materials.
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70-76: Work is complete and meets expectations on some points while operates below expectations on others
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60-69: Work is incomplete or completed with minimal comprehension and effort.
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< 60: Work is unacceptable and does not fulfill the requirements.
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**Things to Do to Support Your Success**


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Be curious and openminded	Take risks and push your abilities and limits
Be organized	Ask good questions
Be prepared to do things more than once	Work in studio
Take notes for each other during reviews	Find a way to be passionate about your work
Work consistently throughout the term	Build healthy habits in terms of food, friends and sleep

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**TIME EXPECTATIONS**

ARCH 193 occupies two full days of your week. It is expected that all of your studio work can be completed during these two work days and up to one additional day. This adds up to up to 14 - 21 hours a week. Please keep this in mind when planning your time, and notify the Coordinator if there are persistent issues completing work within this time frame.

**COLLABORATIVE WORK**

Professional practice in architecture, design or engineering takes place through close collaborations between teams of people. Identifying effective ways to communicate, assign responsibilities, identify milestone and achieve objectives are essential skills to succeed in professional practice. For this reason, the studio will require students at times to work in teams. This collaboration should allow for intensive work and iteration to take place in parallel.

All members of each group will be graded equally.

**SCHEDULE**

\*See Calendar\*

## arch 193 winter 2022

	mon	tues	wed	thurs	fri	sat/sun
jan	3	4	5	6 Studio Intro <b>P1.1 assigned</b> Lecture	7	8/9 <b>10 pm Sunday P1.1 due</b>
	10 Group pinups P1.2 assigned Lecture	11	12	13 Desk crits	14	15/16 <b>10 pm Sunday P1.2 due</b>
	17 Group pinups P1.3 assigned	18	19	20 Desk crits	21	22/23
	24 Desk crits	25	26	27 Desk crits	28	29/30 <b>10 pm Sunday P1.3 due</b>
feb	31 P1 Reviews	1	2	3 <b>P2 assigned</b> lecture	4	5/6
	7 Seminars	8	9	10 Seminars	11	12/13
	14 Seminars <b>10 pm P2 due</b>	15	16	17 P2 Gallery Exhibit <b>P3 Assigned</b> Lecture	18	19/20
	21	22	23	24	25	26/27
	r	e	a	d	i	n
	g	w	e	e	k	

	mon	tues	wed	thurs	fri	sat/sun
mar	28 Desk crits	1	2	3 Desk crits	4	5/6
	7 Desk Crits	8	9	10 Desk Crits	11	12/13
	14 Desk crits	15	16	17 Desk crits	18	19/20
	21 Mid Review	22	23	24 Desk crits	25 Good Friday	26/27
apr	28 Desk crits	29	30	31 Desk crits	1	2/3
	4 Desk crits	5 Classes end	6 10:00 project 3 due	7	8	9/10
	12 loft Final Reviews	12	13	14	15	16/17
	18	19	20	22	22	23/24

**COURSE DELIVERY PLATFORMS & COMMUNICATION:**

While this course will begin online, it will be delivered live as soon as it is deemed safe to do so, and class attendance will then be expected during class hours. To support live and remote learning we will also be using digital platforms to deliver, organize and share course content, learning and work. During the first few weeks and in the event that we must return to remote learning, digital platforms may become the sole means of communication. Here is a breakdown of tools we will use in this course:

**Teams:**

- Course document archive
- Day to day announcements and communications
- Live documents such as sign-up sheets
- Live lectures, tutorials, crits, and reviews

**Learn:**

- Submissions
- Grades

**Email:** (primary form of communication)

- Formal class announcements and communications
- All communications with instructors and TAs
- All communications regarding special circumstances, student accommodations and late submissions to be directed to Rick Andrighetti (reandrighetti@uwaterloo.ca)) or to the undergraduate officer ONLY. students are responsible for checking their email regularly

**Miro:**

- Each student will have a pin up space in Miro to support individual critiques and cross class sharing as needed
- Support for group crits and reviews

**Informal questions should wait until scheduled studio hours for teaching faculty, and until scheduled tutorial hours for teaching assistants. No Teams messaging will be responded to at other times.**

**SUBMISSIONS:**

All assignments will be submitted on Learn. When possible, please combine files into a single PDF. Large PDFs should be compressed using Acrobat Pro or smallpdf.com.

**Late Submissions:**

No late work will be accepted in this course. Assignments that are handed in late will receive 0%. Only in the case of a documented medical or personal reason will these penalties be waived, and only if these have been officially submitted to the Undergraduate Student Services Coordinator and accepted by the Undergraduate Office.



Students seeking accommodations due to COVID-19, are to follow Covid-19-related accommodations as outlined by the university here:

<https://uwaterloo.ca/coronavirus/academic-information#accommodations>

### **Passing Grades**

The minimum passing for ARCH 193 is 60%. Grades below the specified passing grade result in a course failure. Students must pass the final project in order to receive a passing grade for the course.

### **Course Time Zone**

All dates and times communicated in the document are expressed in Eastern Time. Eastern Standard Time (EST, UTC-05:00) applies November to March and Eastern Daylight Time (EDT, UTC-04:00) applies from March to November.

### **WINTER 2022 COVID-19 SPECIAL STATEMENT:**

Given the continuously evolving situation around COVID-19, students are to refer to the University of Waterloo's developing information resource page (<https://uwaterloo.ca/coronavirus/>) for up-to-date information on academic updates, health services, important dates, co-op, accommodation rules and other university level responses to COVID-19.

If course activities are disrupted due to COVID-related UW mandated restrictions, the course will continue, albeit in an online environment. If in-person attendance is restricted or eliminated entirely we will pivot to using MS-TEAM to carry out remote class meetings.

Students who may be absent due to self-isolation requirements will be able to join the class remotely. This is a special consideration extended to those required to self-isolate by public health guidelines. Students must inform the instructor of this at least 24hrs prior to class meetings so that online access can be arranged. The course will also pivot to online meetings if the instructor faces any self-isolation requirements.

### **STUDENT NOTICE OF RECORDING:**

**As a general rule, lectures, presentations and desk crits will not be recorded.** However, as we pivot to remote teaching to start the term, instructors will determine at their discretion whether or not some lectures need to be recorded. In this case, the course's official Notice of Recording document will be found on the course's LEARN site. This document outlines shared responsibilities for instructors and students around issues of privacy and security. Each student is responsible for reviewing this document.

### **FAIR CONTINGENCIES FOR EMERGENCY REMOTE TEACHING:**

We are facing unusual and challenging times. The course outline presents the instructor's intentions for course assessments, their weights, and due dates in Winter 2022. As best as possible, we will keep to the specified assessments, weights, and dates. To provide contingency for unforeseen circumstances, the instructor reserves the right to modify course topics and/or assessments and/or weight and/or deadlines with due and fair notice to students. In the event

of such challenges, the instructor will work with the Department/Faculty to find reasonable and fair solutions that respect rights and workloads of students, staff, and faculty.

**MENTAL HEALTH SUPPORT:**

All of us need a support system. We encourage you to seek out mental health supports when they are needed. Please reach out to Campus Wellness (<https://uwaterloo.ca/campus-wellness/>) and Counselling Services (<https://uwaterloo.ca/campus-wellness/counselling-services>).

We understand that these circumstances can be troubling, and you may need to speak with someone for emotional support. Good2Talk (<https://good2talk.ca/>) is a post-secondary student helpline based in Ontario, Canada that is available to all students.

**EQUITY, DIVERSITY AND INCLUSION COMMITMENT:**

At the School of Architecture, we are committed to foster and support equity, diversity and inclusion. We recognize however, that discrimination does occur, sometimes through an isolated act, but also through practices and policies that must be changed. If you experience discrimination, micro-aggression, or other forms of racism, sexism, discrimination against LGBTQ2S+, or disability, there are different pathways to report them:

A) If you feel comfortable bringing this up directly with the faculty, staff or student who has said or done something offensive, we invite you, or a friend, to speak directly with this person. People make mistakes and dealing with them directly in the present may be the most effective means of addressing the issue.

B) you can reach out to either the Undergraduate office, Graduate office, or Director (Anne Bordeleau). If you contact any of these people in confidence, they are bound to preserve your anonymity and follow up on your report.

C) You may also choose to report centrally to the Equity Office. The Equity Office can be reached by emailing [equity@uwaterloo.ca](mailto:equity@uwaterloo.ca). More information on the functions and services of the equity office can be found here: <https://uwaterloo.ca/human-rights-equity-inclusion/about/equity-office>.

**ACADEMIC INTEGRITY, GRIEVANCE, DISCIPLINE, APPEALS AND NOTE FOR STUDENTS WITH DISABILITIES:****Academic integrity:**

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check the Office of Academic Integrity for more information.]

**Grievance:**

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4. When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

**Discipline:**

A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for his/her actions. [Check the Office of Academic Integrity for more information.] A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate associate dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline. For typical penalties, check Guidelines for the Assessment of Penalties.

**Appeals:**

A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals.

**Note for students with disabilities:**

AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

**Turnitin.com:**

Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.

And that's all....