

## SYLLABUS

### Territorial Acknowledgement

We acknowledge that the School of Architecture is located on the traditional territory of the Neutral, Anishinaabeg 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 (<https://uwaterloo.ca/engineering/about/territorial-acknowledgement>).

### Instructor & T.A. Information

**Instructor** Zoë Hanneman  
e: [zhannema@uwaterloo.ca](mailto:zhannema@uwaterloo.ca)

**Teaching Assistants** Salina Victoria Lee  
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### Classroom & Tutorial Information

**Lectures** Fridays 9:30 am to 12:20 pm (EDT/EST)

All lectures will occur live\* in our WebEx classroom until classes are available in person:  
[https://uwaterloo.webex.com/meet/ARCH362\\_classroom\\_winter2022](https://uwaterloo.webex.com/meet/ARCH362_classroom_winter2022)

**Tutorials** Tuesdays 2:00 pm to 3:50 pm (EDT/EST)

All tutorials will occur live\* in our WebEx classroom until classes are available in person:  
[https://uwaterloo.webex.com/meet/ARCH362\\_classroom\\_winter2022](https://uwaterloo.webex.com/meet/ARCH362_classroom_winter2022)

**Office Hours** By appointment only

All office hours will occur live in our WebEx classroom:  
[https://uwaterloo.webex.com/meet/ARCH362\\_classroom\\_winter2022](https://uwaterloo.webex.com/meet/ARCH362_classroom_winter2022)

TA and Instructor office hours will be hosted in our WebEx classroom space but will not be recorded to maintain privacy.

### Course Description

**Course Description** Architectural case studies are used to examine conceptual development, structural design, building process and the selection of structural steel and concrete systems. Topics such as tension, flexural and compression members; and connections are studied using calculations, design aids, rules of thumb and the latest CSA design standards. [Offered: W]

**Learning Objectives** By the end of the course, students will be able to:  
Examine the strengths and weaknesses of material selection at the conceptual development phase. Students will be able to use both rules of thumb as well as the basic principles of structural engineering to make choices about using steel and concrete materials in an Architectural design. Structural analysis of steel and concrete members in compression, tension, and bending as well as connections will be understood using calculations and the latest CSA design standards.

**Required Text** All required materials will be provided in class and will be made available on Learn.

## Course Requirements & Assessment

<b>Course Assessment</b>	Quizzes	18%	3 Quizzes @ 6% each
	Assignment Drafts	12%	4 Draft Assignments @ 3% each (pass / fail)
	Midterm	40%	
	Final Project	30%	Ungraded portion of assignment drafts added to value of assignment final (total 42% max)
	TOTAL	100%	
<b>Course Policies</b>	Each student is requested to bring a hand calculator to every class meeting. Cell phones are prohibited from use in class at all times. The exception to this rule is any device necessary for the accommodation of a student with special needs.		
<b>Homework</b>	Weekly problem sets will be handed out in tutorial sessions with numerical answers supplied. The homework sets are not marked for grades; they are meant to prepare you for assessments.		
<b>Assignment &amp; Final Project</b>	All drafts, assignments, & projects are to be submitted online to Crowdmark at the "Due Time" on the day they are due, as indicated on the course schedule. As much as possible, we will attempt to return graded work within a two-week period.		
<b>Late Work</b>	<p>Late assignment drafts will not be accepted after the submission deadline.</p> <p>Late final projects will receive an initial penalty of 20% on the first calendar day late and a 5% penalty per calendar day thereafter. After 5 calendar days, the assignment will receive a 0%.</p> <p>Only in the case of a justified medical or personal reason will these penalties be waived, and only if these have been officially submitted to the Undergraduate Student Services Co-Ordinator and accepted by the Undergraduate Office.</p> <p>Students seeking accommodations due to COVID-19, are to follow Covid-19-related accommodations (<a href="https://uwaterloo.ca/coronavirus/academic-information#accommodations">https://uwaterloo.ca/coronavirus/academic-information#accommodations</a>).</p>		
<b>Quizzes</b>	Quizzes are started during the tutorial and will be available asynchronously until 10:00pm the following day. The TA will only be available during tutorial hours for help.		
<b>Midterm Exam</b>	The midterm exam will be an open-notes exam. Students will be responsible for all material covered in the course, both in-class and in-tutorial notes. For computation, only scientific calculators are allowed, unless for the accommodation of a student with special needs.		
<b>Technical Difficulty Grace Period</b>	There is an allowed "technical difficulty grace period" of 30 minutes for all deadlines. To qualify, you must immediately email the instructor within the 30-minute grade period and provide evidence of the issue. Late assessments without evidence of technical difficulty will be penalized.		
<b>COVID-19 Special Statement</b>	Given the continuously evolving situation around COVID-19, students are to refer to the University of Waterloo's developing information resource page ( <a href="https://uwaterloo.ca/coronavirus/">https://uwaterloo.ca/coronavirus/</a> ) for up-to-date information on academic updates, health services, important dates, co-op, accommodation rules and other university level responses to COVID-19.		
<b>In-person Activities Planning</b>	When COVID-related UW mandated restrictions are lifted and the course is offered in-person, 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 only. 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.		
<b>Fair Contingencies for Emergency Remote Teaching</b>	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.		

## Course Schedule

Week	Lecture / Tut	Date	Topic	Assessments	Start / Due Time
1	Lecture 1	Jan 7	Introduction		
2	No Tutorial	Jan 11	No tutorial		
	Lecture 2	Jan 14	Foundations		
3	Tutorial 1	Jan 18	Foundations Review	Quiz 1: Foundations	DUE ONLINE: Jan 19 <sup>th</sup> @ 10:00 pm (EDT/EST)
	Lecture 3	Jan 21	Concrete 1	Draft 1: Foundations	9:00 am (EDT/EST)
4	Tutorial 2	Jan 25	Concrete 1 Review		
	Lecture 4	Jan 28	Concrete 2.1		
5	Tutorial 3	Feb 1	Concrete 2 Review	Quiz 2: Concrete	DUE ONLINE: Feb 2 <sup>nd</sup> @ 10:00 pm (EDT/EST)
	Lecture 5	Feb 4	Concrete 2.2	Draft 2: Concrete	9:00 am (EDT/EST)
6	Tutorial 4	Feb 8	Concrete 2 review		
	Lecture 6	Feb 11	Steel 1		
7	Tutorial 5	Feb 15	Review + Final Project Intro		
	Midterm	Feb 18	Midterm Exam (2.5 hours)	Midterm Exam	9:30 am (EDT/EST)
8	No Class	Feb 21st - Feb 27th	Reading Week		
9	Tutorial 6	Mar 1	Steel 1 Review		
	Lecture 7	Mar 4	Steel 2	Draft 3: Steel	9:00 am (EDT/EST)
10	Tutorial 7	Mar 8	Steel 2 Review	Quiz 3: Steel	DUE ONLINE: Mar 9 <sup>th</sup> @ 10:00 pm (EDT/EST)
	Lecture 8	Mar 11	Masonry		
11	Tutorial 8	Mar 15	Masonry Review		
	Lecture 9	Mar 18	Systems	Draft 4: Masonry	9:00 am (EDT/EST)
12	Tutorial 9	Mar 22	Review & Final Project + Final Assignment Q&A		
	Lecture 10	Mar 25	Special Topics		
13	Tutorial 10	Mar 29	Review & Final Project + Final Assignment Q&A		
	Lecture 11	April 1	Special Topics / Q&A		
14	No Class	April 19	Final Project Due	Final Project	3:30 pm (EDT/EST)

Schedule Issued: January 10, 2022

## Course Delivery Platforms & Communication

### Learn

URL: <https://learn.uwaterloo.ca/d2l/home>  
Course Announcements  
Posted Content\* (Lecture & Tutorial recordings, readings, assignments)  
Homepage has links to all our other online tools  
Submitting Assignments  
Writing Quizzes

### WebEx

URL: [https://uwaterloo.webex.com/meet/ARCH362\\_classroom\\_winter2022](https://uwaterloo.webex.com/meet/ARCH362_classroom_winter2022)  
Lectures and Tutorials  
Office Hours

### Crowdmark

URL: <https://app.crowdmark.com/sign-in/uwaterloo>  
Submitting Tests  
Submitting Final Project  
Receiving Feedback

(First time users: select Waterloo as your institution and use userid@uwaterloo.ca to log in)

### Video Call Protocol

Expected behaviour on video calls:

1. Arrive early. We will try to launch at least 10 minutes in advance of the scheduled time
2. Please sign in using your real name.
3. Mute yourself when you are not talking.
4. Use the chat window to ask questions during the lecture. The TAs will be monitoring this.
5. Tech Support: if you are having trouble with your connection, we will be recording the sessions and they will be posted to Learn at the end of the session. Some basic troubleshooting tips can be found [here](#), this one is for [audio](#) problems.
6. At the end of the session, we will have an open question period, where you can type out your question into the chat and the lecturer will respond. These may need to be moderated, and a host will do this if there are too many questions at once.

#### The WebEx Interface



The WebEx menu from left to right includes:

- **Mute/Unmute** (please mute yourself when not talking)
- **Camera (On/Off)**
- **Share Screen** (the lecturer will be sharing their screen)
- **Record** (the lecture will be recorded; you do not need to)
- **Participants List (Open/Close)**
- **Chat Window (Open/Close)**
- **More Options** (adjust your audio/visual settings)
- **Leave Meeting**

### Student Notice of Recording

As we pivot to remote teaching to start the term, instructors may need to record lectures. 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.

*\*All recorded lectures & tutorials will be posted on LEARN. Students are strongly encouraged to attend all course lectures and tutorials live.* Students wishing not to be captured in the recordings have the option of participating through the direct chat and keeping their camera off. Recordings may be used for future offering of the course / other related courses.

## Support & Inclusion Commitment

### 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

The School of Architecture is committed to foster and support equity, diversity and inclusion. If you experience discrimination, micro-aggression, or other forms of racism, sexism, discrimination against 2SLGBTQ+, or disability, there are several pathways available for addressing this:

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 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 can 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>.

D) [Racial Advocacy for Inclusion, Solidarity and Equity \(RAISE\)](#) is a student-led Waterloo Undergraduate Student Association (WUSA) service launching in the Winter 2019 term. RAISE serves to address racism and xenophobia on the University of Waterloo campus with initiatives reflective of RAISE's three pillars of Education and Advocacy, Peer-to-Peer Support, and Community Building. The initiatives include but are not limited to: formal means to report and confront racism, accessible and considerate peer-support, and organization of social events to cultivate both an uplifting and united community. You can report incidents using their [online form](#).

## Avoidance of Academic Offenses

### 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. See the [UWaterloo Academic Integrity webpage](#) for more information.

### Grievance

A student who believes that a decision affecting some aspect of his/her/their 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 academic offences, and to take responsibility for their 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.