

Syllabus

Instructor

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Teaching Assistant

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Lectures

Wednesdays, 15:00-18:00 (EDT), Microsoft Teams classroom
(lectures recorded for later/repeat viewing)

Tutorials

Throughout the term, upon request

Midterm Review Session: Monday 28 June 2021 20:00-23:00 (EDT)

Final Exam Review Session: Monday 9 August 2021

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. For more information see: <https://uwaterloo.ca/engineering/about/territorial-acknowledgement>

Course Description

Processes of structural design, load determination, construction process and limit states design are referenced and presented within a timber engineering context. Timber design topics such as flexural, compression and tension members, connections, and plywood construction are studied using calculations, design aids, rules of thumb and the latest CSA design standards.

Textbook

2017 Wood Design Manual (Canadian Wood Council)

Grade Distribution

Assignment 1	10%
Assignment 2	10%
Assignment 3	10%
Midterm Exam	30%
Final Exam	40%

(refer to the instructional plan herein for due dates)

Instructional Plan

12 May 2021 (Wednesday)	1	Wood as a Material
	2	Wood as a Structural Member
19 May 2021 (Wednesday)	3	Limit States Design
	4	Wood as a Design Consideration
26 May 2021 (Wednesday)	5	Tension Members
2 June 2021 (Wednesday)	6	Compression Members
9 June 2021 (Wednesday)	7	Bending Members
16 June 2021 (Wednesday)	8	Combined Loading
18 June 2021 (Friday), 22:00 EDT	Assignment 1 Due	
23 June 2021 (Wednesday)	9	Bearing
30 June 2021 (Wednesday)	Midterm Exam	
7 July 2021 (Wednesday)	10	Connections
14 July 2021 (Wednesday)	11	Lateral System Design
16 July 2021 (Friday), 22:00 EDT	Assignment 2 Due	
21 July 2021 (Wednesday)	Lateral System Design (continued)	
28 July 2021 (Wednesday)	Review Class (if required)	
30 July 2021 (Friday), 22:00 EDT	Assignment 3 Due	
10 August 2021 (Tuesday)	Final Exam	

Course Delivery & Time Zone

Course Delivery

It is strongly recommended that you create a physical course binder. Course notes in PDF format will be posted to LEARN and should be printed off. These notes will be annotated, and the examples completed, during the contact period. Example solutions and other memos can be interleaved with the notes as necessary. The notes are created in the hope that can serve as a valuable reference throughout your careers.

The course will be delivered via weekly lectures on Microsoft Teams. It is recommended that you attend all lectures during their scheduled slot, both to maintain your progress in the course and ask questions of the instructor in real time. Lectures will be recorded and available for replay within Teams. Grid paper and a calculator will be required during each lecture for examples.

Course Time Zone

All dates and times communicated in the document are expressed in Eastern Daylight Time (EDT, UTC-04:00).

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.

Student Notice of Recording

The course's official *Notice of Recording* document is 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: https://uwaterloo.ca/keep-learning/sites/ca.keep-learning/files/uploads/files/notice_of_recording_template.pdf

All live lectures including questions and answers will be recorded and made available through MS Teams. Students wishing not to be captured in the recordings have the option of participating through the direct chat or question and answer functions in the meeting platforms used.

Course Supports

Accommodations

AccessAbility Services (<https://uwaterloo.ca/disability-services>) collaborates with all academic departments to arrange appropriate accommodations for with students with disabilities. If you require academic accommodations, please register with the office at the beginning of each academic term and contact the course instructor. 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>).

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. 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>.

Course Policies

Assignment Policies

The assignments will be provided on LEARN with clear instructions for their submission. Refer to the instructional plan herein for due dates. The assignments are to be completed individually. Late assignments may be submitted for review and feedback but will receive no credit.

Test Policies

The midterm and final will be completed online and are therefore naturally open-textbook tests. Students will be responsible for the entirety of the course notes and the entirety of the corresponding chapters in the textbook. It is recommended that you provide tabs for important pages within both. Tests are to be completed individually and will be created specifically to identify students that work together. Working together on tests is a serious academic offence.

Institutional Policies

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 (Policy 70)

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 (Policy 71)

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 (Policy 72)

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.