

Carleton University
Department of Civil and Environmental Engineering
ECOR 1055 - Introduction to Engineering Disciplines I
Civil Engineering Section – Fall 2020

Course Outline

- **Instructor Information**

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- **Course Objectives and Learning Outcomes**

The primary objective of the course is to expose students to different aspects of the Civil Engineering program including Structural Engineering, Transportation Engineering, Geotechnical Engineering, Infrastructure Protection and International Security, and Fire Safety. The secondary objective of the course is to provide students with an overview of the other two programs offered in the Department of Civil and Environmental Engineering: the Environmental Engineering program and the Architectural Conservation and Sustainability program. In each lecture, an expert from academia or industry will be invited to present professional activities involved in one of the above-mentioned programs.

Upon successful completion of this course, students will:

- ✓ Acquire a general knowledge on different programs offered at the Department of Civil and Environmental Engineering with the main focus being on the Civil Engineering program.
- ✓ Learn how their undergraduate studies can help them to become a skilled and qualified engineer, and prepare them to pursue graduate studies or a career in industry.
- ✓ Become familiar with career opportunities available in different disciplines of the Civil Engineering program.
- ✓ Explore the experiences of engineers who are well-established in their field and learn about the qualities of a good engineer.

Tentative Weekly Schedule (the schedule may change during the course)

Lecture	Program	Date	Time	Speaker	Presentation	Topic
1	Course Overview; Structural Eng.	9/9	1:05 – 2:25	V. Sadeghian (CU)	Live	Introduction to Civil Engineering; course overview.
						Structures and earthquakes.
2	Transportation Eng.	16/9	1:05 – 2:25	Y. Hassan (CU)	Live	An introduction to Transportation Engineering (part 1)
3	Geotechnical Eng.	23/9	1:05 – 2:25	M. Rayhani (CU)	Live	An introduction to Geotechnical Engineering.
4	Environmental Eng.	30/9	1:05 – 2:25	P. Van Geel (CU)	Pre-Recorded	Overview of Environmental Engineering.
5	Structural Eng.	7/10	1:05 – 1:45	T. Sherwood (CU)	Pre-Recorded	Structural Engineering: past, present, and future.
			1:45 - 2:25	TBA	TBA	TBA
6	Transportation Eng.	14/10	1:05 – 2:25	A. Weiss (CU)	Live	An introduction to Transportation Engineering (part 2)
7	Geotechnical Eng.	21/10	1:05 – 2:25	S. Sivathayalan (CU)	Live	Get a good foundation – or plan to fly, float or fall down!
-----Fall Break-----						
8 (part 1)	Structural Eng.	4/11	1:05 – 1:45	A. Tavassoli (Arup)	Live	Overview of structural engineering projects at Arup.
8 (part 2)	Geotechnical Eng.	4/11	1:45 - 2:25	M. Cunningham (Marathon)	Pre-Recorded	Overview of projects at Marathon Drilling.
9	ACSE	11/11	1:05 – 1:45	S. Bucking (CU)	Pre-Recorded	Overview of Architectural Conservation and Sustainability Engineering.
10	Graudate studies	18/11	1:05 – 1:45	Graduate students	Live	Life as a graduate student at Carleton
11	Fire Safety	25/11	1:05 – 2:25	H. Hajiloo (CU)	Live	Fire: how to feel safe at home?
12 (part 1)	Transportation Eng.	2/12	1:05 – 1:45	M. Shafiee (NRC)	Live	Where the rubber meets the road.
12 (part 2)	Forensic Eng.	2/12	1:45 - 2:25	F. Habibi (Caskanette Udall)	Live	What is Forensic Engineering?

- **Evaluation and Grading Scheme**

This course is graded SAT/UNS (Satisfactory/Unsatisfactory). In order to be given a SAT grade in the course, you must attend at least 10 of the 12 sessions. The lectures will be held online through Zoom on Wednesdays from 1:05 to 2:25 pm. The Zoom link will be sent to students by email.

- **ECOR 1056 Course**

Upon successful completion of ECOR 1055, students are required to take ECOR 1056 in the Winter semester. ECOR 1056 is an online course which includes selected videos recorded from the seminars presented in ECOR 1055. This course will give students the opportunity to learn about the programs from the other departments.

- **General Regulations**

- 1) **Attendance:** Students are expected to attend all lectures. The university requires students to have a conflict-free timetable. For more information, see the current *Undergraduate Calendar, Academic Regulations of the University, Section 1.2, Course Selection and Registration and Section 1.5, Deregistration*.
- 2) **Academic Integrity:** Students should be aware of their obligations with regards to academic integrity. Please review the information about academic integrity at: <https://carleton.ca/registrar/academic-integrity/>. This website also contains a link to the complete Academic Integrity Policy that was approved by the University's Senate.
- 3) **Plagiarism:** Plagiarism (copying and handing in for credit someone else's work) is a serious instructional offense that will not be tolerated.
- 4) **Academic Accommodation:** You may need special arrangements to meet your academic obligations during the term. You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at <http://www.carleton.ca/equity/>. For an accommodation request, the processes are as follows:
 - **Pregnancy or Religious obligation:** Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see <https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf>

- **Academic Accommodations for Students with Disabilities:** The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your *Letter of Accommodation* at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*). **Requests made within two weeks will be reviewed on a case-by-case basis.** After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website (www.carleton.ca/pmc) for the deadline to request accommodations for the formally-scheduled exam (*if applicable*).
 - **Survivors of Sexual Violence:** As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <https://carleton.ca/sexual-violence-support/>.
 - **Accommodation for Student Activities:** Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>
- 5) **Copyright on Course Materials:** The materials created for this course (including the course outline, presentations, posted notes, etc.) are intended for personal use and may not be reproduced or redistributed or posted on any website without prior written permission from the author(s).