Instructor: Abid Hussain (Assistant Professor, CEE)
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Email: abid.hussain@carleton.ca
Lectures: Thursdays, 8:35 – 9:55 am

Calendar Information

ECOR 1055 – Introduction to Engineering Disciplines I
http://calendar.carleton.ca/undergrad/courses/ECOR/

Course Objectives and Learning Outcomes

By the end of this course, students should understand the scope and impact of their chosen engineering discipline and distinguish between different specialties within their field of study.

Sections Scheduled

ECOR 1055  A  Civil Engineering
ECOR 1055  B  Software Engineering
ECOR 1055  C  Computer Systems Engineering
ECOR 1055  D  Architectural Conservation & Sustainability Engineering
**ECOR 1055  E  Environmental Engineering**
ECOR 1055  F  Communications Engineering
ECOR 1055  G  Aerospace Engineering
ECOR 1055  H  Mechanical Engineering
ECOR 1055  I  Electrical Engineering and Engineering Physics
ECOR 1055  J  Biomedical and Electrical Engineering
& Biomedical and Mechanical Engineering
ECOR 1055  K  Sustainable and Renewable Energy Engineering (A/B)
Evaluation and Grading Scheme
This course is graded SAT/UNS, and all students are expected to attend all the sessions. To be given an SAT grade in the course, you must attend at least 10 of 12 sessions.

Tentative Lecture Topics

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<tr>
<th>Lecture #</th>
<th>Topic</th>
<th>Speaker</th>
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<tr>
<td>1. Sept 9</td>
<td>Welcome, overview of resources for engineering students, overview of the environmental engineering program</td>
<td>Prof Hussain</td>
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<tr>
<td>2. Sept 16</td>
<td>COVID-19 monitoring in wastewater</td>
<td>Prof Ormeci (V)</td>
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<tr>
<td>3. Sept 23</td>
<td>Water Resources Engineering and the 100-year storm</td>
<td>Prof Van Geel</td>
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<tr>
<td>4. Sept 30</td>
<td>Waste and/or Resource Management</td>
<td>Prof Simms</td>
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<td>5. Oct 7</td>
<td>Air Quality, Applications and issues</td>
<td>Prof Hakami</td>
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<td>6. Oct 14</td>
<td>Climate Change and Environmental Engineering</td>
<td>Prof Walker (TBC)</td>
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<td>7. Oct 21</td>
<td>The 2014 embankment breach at the Mount Polley Tailings Storage Facility</td>
<td>Prof. Elena Zabolotnii</td>
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<tr>
<td>8. Nov 4</td>
<td>Speaker from Environmental Industry</td>
<td>Mr. Swakar Saha (GHD)</td>
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<td>9. Nov 11</td>
<td>Geo-Environmental Green House Gases</td>
<td>Prof. Van De Ven</td>
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<td>10. Nov 18</td>
<td>Sustainable Urban Infrastructure</td>
<td>Prof Kim</td>
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<td>11. Nov 25</td>
<td>Water</td>
<td>Prof Basu</td>
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<td>12. Dec 2</td>
<td>Role of Environmental Engineers in Multi-Lateral Organizations (e.g., UN, World Bank, ADB)</td>
<td>Mr. Munawar Alam (ADB)</td>
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(V) video
General Regulations

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.

Appeal of Grades: The processes for dealing with questions or concerns regarding grades assigned during the term and final grades is described in the Undergraduate Calendar, Academic Regulations of the University, Section 2.7, Informal Appeal of Grade and Section 2.8, Formal Appeal of Grade.

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 site also contains a link to the complete Academic Integrity Policy that the University’s Senate approved.

Plagiarism: Plagiarism (copying and handing in for credit someone else's work) is a serious instructional offense that will not be tolerated.

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

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