

**Carleton University**  
**Department of Civil and Environmental Engineering (CEE)**  
**ENVE 4104 A: ENVIRONMENTAL PLANNING AND IMPACT ASSESSMENT**  
**WINTER 2026**

### Teaching Team

**Instructor:** Dr. Muhammad Salam  
**Office:** MC 2032  
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**Office Hours:** TBD

**TA(s):** Information will be posted on Brightspace

### Course Description and Requirements

#### 1) Course schedule:

**Lectures:** Tuesday and Thursday, 14:35 – 15:55

**PA Sessions:** Monday, 11:35 – 12:55

Please refer to the [Public Class Schedule](#) for the most recent information

#### 2) Course description:

This course will introduce the principles, purposes, and processes involved in environmental impact assessment (EIA).

#### 3) Prerequisites and recommended knowledge:

ENVE 3004 and fourth-year status in Engineering.

#### 4) Learning outcomes:

- Different stages/steps involved in the Federal EIA
- Key differences between federal and provincial EIA
- Different methods/tools used for EIA
- Considerations of environmental sustainability for engineering/development projects

#### 5) Graduate Attributes:

The Canadian Engineering Accreditation Board (CEAB) requires graduates of undergraduate engineering programs to possess 12 attributes. Courses in all four years of our programs evaluate students' progress towards acquiring these attributes. Aggregate data (typically, the data collected in all sections of a course during an academic year) is used for accreditation purposes and to guide improvements to our programs. Some of the assessments used to measure GAs may also contribute to final grades; however, the GA measurements for individual students are not used to determine the student's year-to-year progression through the program or eligibility to graduate. The following list provides the GAs that will be measured in this course, along with the Learning Outcomes that are intended to develop abilities related to these attributes.

GA - Indicator	Assessment Tool
Personal and group time management	Assignment and Presentations

Group culture and dynamics	Assignment and Presentations
Place of engineering in society	Assignment
Sustainable Design	Assignment
Interactions – engineer with stakeholders	Assignment

For information on GAs and continual curriculum improvement, visit the [Accreditation section of Engineers Canada website](#).

## 6) Accreditation Units

Complementary Studies	Engineering Design
75%	25%

## 7) Textbook(s)/References

No prescribed textbook. Lecture notes and additional materials will be provided through the course website. Hence, students are not required to purchase textbooks or other learning materials for this course. The following reference books can be used for supplementary reading but are not mandatory.

Reference Books:

1. Noble, Bram F. (2021), "Introduction to Environmental Impact Assessment: A Guide to Principles and Practice," Oxford Publishers. Associated estimated cost: \$92.99.
2. Kevin S. Hanna (2016), "Environmental Impact Assessment Practice and Participation, Third Edition," Oxford Publishers. Associated estimated cost: \$125.99.

## 8) Topics and tentative plan

Module 1	Course introduction, aims and objectives of EIA, legislative framework
Module 2	Different stages/steps involved in the EIA processes: <ul style="list-style-type: none"> <li>▪ screening</li> <li>▪ scoping and environmental baseline assessment</li> <li>▪ environmental impacts</li> <li>▪ managing impacts and determining significance</li> <li>▪ follow-up and monitoring</li> </ul>
Module 3	Key differences between federal EIA and provincial EIA, and Ontario EIA
Module 4	Public participation and consultation, Indigenous engagement
Module 5	Cumulative effects assessment, strategic environmental assessment

## 9) Evaluation and marking scheme:

*Assignments (X 3)	30%
*Midterm exam	30%
*Final exam	40%

\*The student needs to submit the assignments on time. No late submission will be accepted unless discussed and approved by the course instructor.

\*The final grade is the weighted average from assignments, a midterm exam, and a final exam. The final exam will cover all course materials.

\* Final exams are for evaluation purposes and will not be returned to students. The exam will be closed-book. Examination Services will set the final examination schedule.

\* Deferred Final Examinations: Students who are unable to write the final examination because of a serious illness/emergency or other circumstance beyond their control, as defined in the [Academic Consideration Policy](#), may apply for accommodation by contacting the Registrar's office. Consult [Section 4.3 of the University Calendar](#).

\* The proctored final exam will be conducted on campus.

### 10) Deferred term work and self-declaration:

Students who claim extenuating circumstances defined in the [Academic Consideration Policy](#), as a reason for missed term work are held responsible for immediately informing the instructor concerned and for making alternate arrangements with the instructor and in all cases. This must occur no later than three (3) days after the term work was due. The alternate arrangement must be made before the last day of classes in the term as published in the academic schedule. Consult [Section 4.4 of the University Calendar](#).

### 11) Academic dates:

Students should be aware of the academic dates and deadlines (e.g., last day for academic withdrawal) posted on the Registrar's office website <https://students.carleton.ca/academic-dates/>

## Academic Integrity and Plagiarism

- a) Please consult the Faculty of Engineering and Design information page about the Academic Integrity policy and our procedures: <https://carleton.ca/engineering-design/current-students/fed-academic-integrity>. Violations of the Academic Integrity Policy will result in the assignment of a penalty such as reduced grades, the assignment of an F in a course, a suspension or expulsion.
- b) One of the main objectives of the Academic Integrity Policy is to ensure that **the work you submit is your own**. As a result, it is important to write your own solutions when studying and preparing with other students and to avoid plagiarism in your submissions. The University Academic Integrity Policy defines plagiarism as “presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.” This includes reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source. Examples of violations of the policy include, but are not limited to:
  - any submission prepared in whole or in part by someone else;
  - using another’s data or research findings without appropriate acknowledgement;
  - submitting a computer program developed in whole or in part by someone else, with or without modifications, as one’s own; and
  - failing to acknowledge sources of information through the use of proper citations when using another’s work, and/or failing to use quotation marks.

## Copyright

The materials (including the course outline, slides, posted notes, videos, labs, projects, assignments, quizzes, exams, and solutions) created for this course are intended for personal use only. They may not be reproduced, redistributed, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording, or otherwise - without written permission from the author(s), both during and after the semester.

## Learning and Working Environment

The University and all members of the University community share responsibility for ensuring that the University's educational, work and living environments are free from discrimination and harassment. Should you have concerns about harassment or discrimination relating to your age, ancestry, citizenship, colour, creed (religion), disability, ethnic origin, family status, gender expression, gender identity, marital status, place of origin, race, sex (including pregnancy), or sexual orientation, please contact the [Department of Equity and Inclusive Communities](#) at [equity@carleton.ca](mailto:equity@carleton.ca). We will strive to create an environment of mutual respect for all through equity, diversity, and inclusion within this course. The space where we work will be safe for everyone. Please be considerate of everyone's personal beliefs, choices, and opinions.

## Academic Accommodations

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

**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](mailto:pmc@carleton.ca).

You should request your academic accommodations in the [Ventus Student Portal](#) for each course at the beginning of every term. For in-term tests or midterms, please request accommodations at least two (2) weeks before the first test or midterm. Please consult the [PMC website](#) for the deadline to request accommodations for the formally scheduled exam (if applicable).

**Accommodation for Student Activities:** Carleton University recognizes the substantial benefits, both to the individual student and to the university, which 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 the [Senate Policy on Accommodation for Student Activities \(PDF\)](#).

**Pregnancy 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, please review the [Student Guide to Academic Accommodation \(PDF\)](#).

**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, please review the [Student Guide to Academic Accommodation \(PDF\)](#).

**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 the [Sexual Violence Prevention & Survivor Support](#).

## Engineering Academic Advising

[The Engineering Academic Support Service](#) assists undergraduate engineering students with course selection, registration, and learning support from first year through to graduation.

Academic Advisors Contact can be found here: <https://carleton.ca/engineering-design/current-students/undergrad-academic-support/undergraduate-advisors/>.

## Student Mental Health and Wellness

As a university student, you may experience a range of mental health challenges that can significantly impact your academic success and overall well-being. Carleton's [Wellness Services Navigator](#) is designed to help students connect with mental health and wellness resources.

If you need to talk to someone from the department for more information and support with connecting to resources, you can contact the following faculty members, depending on your program. Or contact the department at [CEEUGChair@cunet.carleton.ca](mailto:CEEUGChair@cunet.carleton.ca).

### **ACSE: Professor Elie Azar**

Email: [Elie.Azar@carleton.ca](mailto:Elie.Azar@carleton.ca), Office: 3432 Mackenzie

### **CIVE: Professor Christian Viau**

Email: [Christian.Viau@carleton.ca](mailto:Christian.Viau@carleton.ca), Office: 4535 Mackenzie

### **ENVE: Professor Cole Van De Ven**

Email: [cole.vandeven@carleton.ca](mailto:cole.vandeven@carleton.ca), Office: 6210 Canal Building

Here is a list of on-campus and off-campus resources:

1. **Carleton's Health and Counselling Services:** To book an appointment, contact the main Clinic by calling (613) 520-6674. If urgent, let the Patient Care Coordinator know or go in person to the main clinic (2500 Carleton Technology and Training Centre Building) and indicate that they are in crisis and need to speak to someone right away. For more information, please see <https://carleton.ca/health/>
2. **Emergencies and Crisis:** <https://wellness.carleton.ca/get-help-now/>
3. **Good2Talk (1-866-925-5454):** Good2Talk is a free, confidential helpline providing professional counselling and information and referrals for mental health, addictions and well-being to post-secondary students in Ontario, 24/7/365 <https://good2talk.ca/>
4. **Empower Me:** Undergraduate students have access to free counselling services in the community through Empower Me, either in person, by telephone, video-counselling, or e-counselling. **This free service is accessible 24/7, 365 days per year.** Call **1-844-741-6389 (toll-free)** to make an appointment with a counsellor in the community. More information is available at <https://students.carleton.ca/services/empower-me-counselling-services/>
5. **The Walk-In Counselling Clinic (off-campus community resource):** The walk-in Counselling Clinic have offices in various locations across Ottawa and the greater Champlain

Region that are open 7 days a week. Individuals will be assisted, with no appointment, on a first-come, first-served basis during the Walk-in Counselling Clinic hours. The Walk-in Counselling Clinic **offers services in many languages** and is free and confidential. More information can be found at: <https://walkincounselling.com/>

6. **Distress Centre of Ottawa and Region:** Available 10 am-11 pm, 7 days/week, 365 days/year. **Distress Line:** 613-238-3311, **Crisis Line:** 613-722-6914 or 1-866-996-0991, **Text:** 343-306-5550. <https://www.dcottawa.on.ca/>
7. **Distress and Crisis Ontario:** Available for chat 2 pm – 2 am EST. <https://www.dcontario.org/>
8. **BounceBack Ontario (Toll-Free: 1-866-345-0224)** is a free skill-building program managed by the Canadian Mental Health Association (CMHA). It is designed to help adults and youth 15+ manage low mood, mild to moderate depression and anxiety, stress or worry. Delivered over the phone with a coach and through online videos, you will get access to tools that will support you on your path to mental wellness. <https://bouncebackontario.ca/>.
9. **Carleton's Wellness Desk:** Located at 204A MacOdrum Library, it is a space for students to learn about resources, connect with our Wellness Coordinator, and decompress during stressful times of the year. You can pop into the Wellness Desk any time during its hours of operation – no appointments necessary! <https://wellness.carleton.ca/mental-health/wellness-desk/>
10. **Residence Counselling and Wellness Service:** Counselling services specifically for students in residence. <https://carleton.ca/health/residence-counselling/>
11. **Therapy Dogs:** Carleton's therapy dogs are around campus with their owners (who are Carleton University staff and faculty) to comfort and provide support to help you thrive as a university student. <https://wellness.carleton.ca/mental-health/therapy-dogs/>