# ACSE/CIVE/ENVE 4918A Design Project – Course Syllabus

## 1 Teaching Team

CEE 4918 Course Coordinator [1]

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ENVE 4918 Co-Coordinator [1]

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[1] The course coordinators are responsible for assembling the project teams, delivering course content through the lecture sessions, organizing the framework for the final capstone design project presentations, and supporting undergraduate project teams seeking to be involved in design project competitions.

CEE Project Supervisors [2]

| | |
| --- | --- |
| ACSE | Professors Bucking, Gunay & Santana |
| CSCE | Professors Hajiloo, Hossain, Khoo, Pouragha, Sadeghian, Sarkar, Sivathayalan, Vandenberg, Viau, Weiss, & Zalok |
| ENVE | Professors Hakami, Hussain, Simms & Walker |

[2] For each respective discipline (ACSE, CIVE & ENVE), the CEE Project Supervisors will guide the project teams, provide technical and editorial feedback, assess (grade) the milestone deliverables, and may invite industry mentors to participate.

Teaching Assistants (TA) — To be updated

# 2 Course Description and Requirements

## 2.1 Schedule

For current information on the location, date and time for classes and PA sessions, see Course Search - Carleton University.

## 2.2 Course Description

Please refer to the following links for ACSE 4918, CSCE 4918 and ENVE 4918.

## 2.3 Precluded Courses

Precludes additional credit for ACSE 4918, ENVE 4918.

## 2.4 Prerequisites and Recommended Knowledge

The Project Supervisor may require specific prerequisite course, which are listed in the Project Descriptions slide deck posted on the course Brightspace page. Some prerequisites may be taken concurrent with ACSE 4918, CSCE 4918 and ENVE 4918.

## 2.5 Overview and Learning Outcomes

The course provides an opportunity for engineering students, with fourth year status, to demonstrate transfer of learning; through the integration and application of knowledge and skills acquired and developed over the course of the engineering program, to solve an open-ended practical (real world) problem. Spanning two academic terms, you will use the engineering design process to formulate a problem statement, define goals, objectives, and constraints, generate potential solutions, select, and assess a short-list of preferred solutions, and, lastly, identify, develop, and refine a preferred engineering design solution. The capstone design project seeks to further develop and enhance your graduate attributes and professional skills. Upon successful completion of this course, the student will be able to:

- apply your engineering knowledge base and technical skills when solving engineering problems,
- utilize appropriate engineering methods and tools (e.g., experiment, analysis,) and apply critical thinking to reach substantiated conclusions that solve engineering problems,
- develop reliable engineered design solutions with confidence in predictable outcomes that integrate best practices, codes, and standards,
- understand the significance and assess the interaction of factors (e.g., cultural, economic, environmental, societal, safety, sustainability, technical) that may impact the engineering design process or outcomes,

- develop an understanding of the roles and responsibilities of the engineering profession in society,
- apply engineering economics (e.g., capital, time value, depreciation), business practices (e.g., risk and change management), and engineering project management practices (e.g., scheduling, milestones, resource/time allocation, procurement), and
- develop and refine teamwork and communication skills (e.g., reading, writing, speaking, active listening) across all stakeholder backgrounds and perspectives (i.e., engineering profession, clients, public).

### 2.6 Textbook(s), References and Resources

There is no textbook for this course. Several resources have been identified to support learning outcomes including supplementary information posted on the course Brightspace page, course reserve (MacOdrum Library), research help services (MacOdrum Library), and subject guides for students in ASCE and CIVE, and ENVE disciplines.

Materials (e.g., notes, textbooks, and other resources) acquired from previous courses will be valuable reference material for guidance during the design project. Online and MacOdrum library resources, which provide guidance across a range of subject areas (e.g., communications, engineering economics, project management, cost estimating, systems analysis, and design synthesis), have also been identified:

Communications

- M. Alley, The Craft of Scientific Presentations: Critical Steps to Succeed and Critical Errors to Avoid. Boca Raton, FL USA: 2nd Edition, Springer, 2013.
- Michael Alley, Website, Penn State, Writing as an Engineering or Scientist
- Michael Alley, Website, Penn State, Assertion-Evidence
- Laplante, P. (2018). Technical Writing: A Practical Guide for Engineers, Scientists, and Nontechnical Professionals. Boca Raton, FL USA: 2nd Edition, CRC Press, eBook ISBN 9780429467394, 2018.

Engineering Economics

- D.L. Whitman and R.E. Terry. Fundamentals of Engineering Economics and Decision Analysis. Synthesis Lectures on Engineering. Springer Chan doi: 10.1007/978-3-031-79348-6, 2012.
- J. Yates. Engineering Economics. Boca Raton, FL USA: CRC Press, 1st Edition, eBook ISBN 9781315368283, 2016.

Design Approach

- L. Amador-Jimenez. Civil Engineering Systems Analysis. Boca Raton, FL USA: CRC Press, 1st Edition, eBook ISBN 9781315381428, 2016.
- G.E. Dieter and L.C. Schmidt. Engineering Design. Boston, MA USA: McGraw-Hill Higher Education, ISBN 0072837039, 2009. [course reserve (MacOdrum Library)]
- P.J. Ossenbruggen. Systems Analysis for Civil Engineers. New York, NY USA: Wiley, ISBN 0471098892, 1984. [course reserve (MacOdrum Library)]

Project Management

- C. Lessard and J. Lessard. Project Management for Engineering Design. Springer Cham, doi: 10.1007/978-3-031-79303-5, 2022.

All materials, either used or referenced in your study, must have the appropriate citation; otherwise, you may have plagiarized your work, which is an academic offence under the Academic Integrity Policy of Carleton University. For engineering reports, the IEEE citation style is the predominant format, but there may be a need to use other citation formats. (e.g., Data, Statistics, Maps and Government Information).

## 2.7 Lecture Topics and Tentative Plan

### 2.7.1 Fall Term

| Fall Term Starts September 4, 2024 (04/09/24) – Classes from 1605-1755 in AT 302 | | |
| --- | --- | --- |
| **Lec #** | **Date** | **Topic** |
| 1 | 5/09/24 | Project Teams: Explore concepts on team building, group dynamics, communications, engagement & leadership.<br>Guest Lecturer: None |
| 2 | 19/09/24 | Project Momentum: Generate, assess possible solutions, identify preferred solutions & communicate findings.<br>Guest Lecturer: Associate Chairs Graduate Studies, Department of Civil and Environmental Engineering, Carleton University |
| 3 | 3/10/24 | Project Clarity: Define goals, objectives, constraints & metric for options analysis & decision basis.<br>Guest Lecturer: TBD |
| 4 | 17/10/24 | Project Integration: Address other factors (e.g., sustainability, resilience, climate change, risk, society) that may influence options & design.<br>Guest Lecturer: Natalie Pinto, Career Services, Carleton University |
| Fall Term Break: October 21-25, 2024 | | |
| 5 | 31/10/24 | Risk Analysis: Qualitative and quantitative approaches to estimation, prediction, and uncertainty.<br>Guest Lecturer: TBD |
| 6 | 14/11/24 | Engineering Best Practices: Use of external resources, internal procedures, guidelines, standards, and codes.<br>Guest Lecturer: TBD |
| 7 | 28/11/24 | Major Projects: Overview of the major processes & elements of an impact assessment framework.<br>Guest Lecturer: “Leadership in Engineering”, Bruce Thomas, President Ron Eastern Construction Ltd. |
| Fall Term Ends December 6, 2024 | | |

### 2.7.2 Winter Term

| Winter Term Starts January 6, 2025 (06/01/25) – Classes from 1605-1755 in AT 102 | | |
| --- | --- | --- |
| **Lec #** | **Date** | **Topic** |
| 8 | 9/01/25 | Philosophy 101: Engineering ethics in technology & society.<br>Guest Lecturer: Natalie Pinto, Career Services, Carleton University |
| 9 | 23/01/25 | Topic: Text TBD.<br>Guest Lecturer: "Engineers in Construction", Bruce Thomas, President Ron Eastern Construction Ltd. |
| 10 | 06/02/25 | Topic: Text TBD.<br>Guest Lecturer: TBD |
| Winter Term Break: February 17-21, 2025 | | |
| 11 | 27/02/25 | Topic: Text TBD.<br>Guest Lecturer: Marilyn Journeaux and Gen Nielsen; City of Ottawa, Infrastructure & Water Services Department |
| 12 | 20/03/25 | Engineering Design Competition Presentations |
| 13 | 27/03/25 | Engineering Design Competition Presentations (if needed) |
| Winter Term Ends April 8, 2025 | | |

### 2.7.3 Course Milestones [1]

| # | Deliverable | Due Date |
|---|---|---|
| M1 | Project Teams [2,3] | 07/09/24 |
| M2 | Conceptual Study Report [2] | 18/10/24 |
| M3 | Feasibility Study Report [2] | 06/12/24 |
| M4 | Interim Study Presentation [2,4] | 06/12/24 |
| M5 | Final Design Presentation [5] | 17/03/24 |
| M6 | Final Design Report [2] | 08/04/25 |

[1] Your Project Supervisor is solely responsible for evaluating your project deliverables and individual performance. In addition to these course milestones, your Project Supervisor may further define the work scope, rubric, weighting, and grade for any additional or intermediate deliverable (e.g., meeting minutes, weekly project memos, weekly presentations). The grade will be integrated with M6 Final Design Report.

[2] Deliverable is due at 2359h (11:59PM Ottawa time) on the specified date. A late penalty of 5% (cumulative) will be imposed for each 24-hour period past the due date (e.g., up to 24 hours is a 5% penalty; 24[+] hours to 48 hours is a 10% penalty). Also refer to See §**Error! Reference source not found.** Self-declaration and deferred term work.

[3] Refer to §2.10 Group Selection with more details on the project group selection process.

[4] Each group is responsible for coordinating the date, time, and location with their respective Project Supervisor. The M4 Interim Presentation may occur at any time during the period 25/11/23-06/12/24.

[5] The course coordinators are responsible for developing the final presentation schedule and format. The anticipated event date is 17/03/25, however If required, an alternate date is 24/03/25. The milestone deliverable is a poster. Details of this milestone (e.g., location, format) will be transmitted later.

**Lecture and Milestone Progression Map**

| Fall Term 2024 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Month | S | | | | | O | | | | N | | | | D |
| Week Start Date | 2 | 9 | 16 | 23 | 30 | 7 | 14 | 21 | 28 | 4 | 11 | 18 | 25 | 2 |
| Lecture Number | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | |
| Milestone Number | | 1 | | | | | 2 | | | | | | | 3,4 |

| Winter Term 2025 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Month | J | | | | F | | | | M | | | | | A |
| Week Start Date | 6 | 13 | 20 | 27 | 3 | 10 | 17 | 24 | 3 | 10 | 17 | 24 | 31 | 7 |
| Lecture Number | 8 | | 9 | | 10 | | | 11 | | | 12 | 13 | | |
| Milestone Number | | | | | | | | | | 5 | | | | 6 |

## 2.8 Evaluation and Marking Scheme

### 2.8.1 Term Assessment

| Assessment Element | Description [Evaluator] | Weight |
| --- | --- | --- |
| In-Class Quiz [1,2] | In-class quiz (lectures 2-11) based on in-class activities. The format may be objective (e.g., multiple choice) or short answer (e.g., essay). 10 Quizzes @1% each. [Course Coordinator] | 10% |
| M2 & M3 Reports [1,3] | Evaluate quality of the milestone reports (M2 and M3) and assess individual performance. Adjust grades accordingly for each team member. 2 reports @15% each. [Project Supervisor] | 30% |
| M4 & M5 Presentations [2,4] | Evaluate the quality of each presentation milestone (M4 & M5). Adjust grades accordingly for each team member. 2 Presentations @10% each. [Project Supervisor] | 20% |
| M6 Report [5] | Assess the project team performance based on M6 Final Design Report. 1 Report @40% [Project Supervisor] | 40% |

[1] Although the course is centered around group activities, individual student performance will be assessed.
[2] See Section 2.8.4.
[3] Individual Performance Self-Assessment Forms will be completed by each member of the project team for the reporting milestones M2: Conception Study Report, M3: Feasibility Study Report, and M6: Final Design Report. These forms should be included in the report annex. The forms qualify the level of active participation, engagement, and professionalism by an individual as part of a project team. Refer to Brightspace Course Information folder for the Individual Performance Self-Assessment Form. By submitting each report, all project team members are explicitly confirming the accuracy of the Individual Performance Self-Assessment Forms provided.
[4] The presentation rubrics are posted in the Brightspace Course Information folder. The Interim Presentation will be presented to your Project Supervisor who may invite other participants (e.g., mentor, external stakeholders from industry, government, and municipalities). The Final presentation will be presented to a wider audience (e.g., class peers, Project Supervisor, TA, mentor, other Professors, external stakeholders such as industry, government, and municipalities). Details of the M5 Final Presentation will be posted on the Brightspace course page when the schedule and location is confirmed.
[5] The report rubric is posted in the Brightspace Course Information folder. A guidance document for each milestone report (M2, M3 & M6) is presented in each respective Brightspace Project Milestones folder. Although the reports are submitted as group deliverables, individual grades may be adjusted as warranted based on the Individual Performance Contributions – refer to section 2.8.4.

#### 2.8.2 Final Examination

There is no final examination in this course.

#### 2.8.3 Final Examination Format and e-Proctoring Statement

There is no final examination in this course.

#### 2.8.4 Additional Evaluation Requirements

To pass the course, each grading component (i.e., Individual: In-Class Quiz, Individual: M2, M3 & M6 Performance Self-Assessment Forms, Individual: M4 & M5 Presentations, and Team Performance: M6 Report) must have a composite grade equal to or greater than a C- Letter grade (60%). Failure to meet this target will result in an assigned letter grade of F for the course.

#### 2.8.5 Deferred Final Examination

There is no final examination in this course.

### 2.9 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.

### 2.10 Group Selection

Students will form groups using the self-selection tool (see information posted on the course website site under milestone M1: Project Team Initiation) to create project teams. The M1: Project Team Initiation self-selection process should be completed as soon as possible but no later than the due date. In general, each project team will have approximately 6 team members. There may be projects requiring a larger team (e.g., external competitions, multi-disciplinary projects). The Project Coordinators may have to re-organize project teams through re-distribution of individuals among the groups or assign individuals to groups.

### 2.11 Design Competitions

There are several external competitions that may be of interest.

#### 2.11.1 Mike Sheflin Student Paper Competition

is an annual event that features design projects from the University of Ottawa and Carleton University focused on public works sponsored by the Ontario Public Works Association Ottawa

Valley Branch. This competition honours Mike Sheflin, who served as Commissioner of Public Works at the Regional Municipality of Ottawa-Carleton (renamed as the City of Ottawa). The Hunt Club Road Bridge across Rideau River is named after Mike Sheflin.

### 2.11.2 PEO Student Paper Night Competition

is an annual event that features design projects from the University of Ottawa and Carleton University based on the capstone design projects. The Tom Folkes Trophy goes to the school whose students delivered the best presentations of the evening as judged by a panel of prominent professional engineers.

### 2.11.3 Canadian Geotechnical Society Student Competition

The Canadian Geotechnical Society Student Competition is an annual student competition to recognize excellence among undergraduate engineering students at Canadian universities. The Undergraduate Report Competition award recognizes skills in solving open-ended geotechnical design problems and preparing formal technical reports. The Group Effort Competition evaluates an additional component on teamwork skills. These awards are assessed based on the written report.

### 2.11.4 Canadian Society for Civil Engineering (CSCE) Capstone Competition

The Canadian Society for Civil Engineering (CSCE) Capstone Competition is an annual national student competition, as part of the CSCE conference, with representatives undergraduate engineering students across Canadian universities. As per the CSCE website: "*The annual CSCE Capstone competition is held during the CSCE Annual Conference in the summer. This competition is open to all senior undergraduate students in an accredited Canadian civil engineering program. Each civil engineering department is invited to submit a nomination for a single entry into the competition in any specialty area of the field (Structural, Construction, Geotechnical, Geomechanics, Hydraulics and Water Resources, Transportation or Environmental Engineering), for projects completed during the preceding academic year. The selected teams attend the annual CSCE conference where they present their projects in a poster session before a jury of experienced practitioners*."

The National Capstone Design Competition is held during the Canadian Society for Civil Engineering (CSCE) Annual Conference. The competition is based on the ACSE/CIVE/ENVE 4918 Design Project framework and is open to all senior undergraduate students in an accredited Canadian Civil Engineering Program. Carleton University can nominate a single entry (team) for the national competition within any speciality area of the field (Structural, Construction, Geotechnical, Geomechanics, Hydraulics and Water Resources, Transportation or Environmental Engineering) for design projects completed during the current academic year. The National

Capstone Design Competition provides an opportunity for two project team members to attend the CSCE Annual Conference and present their study to peers, conference attendees and competition judges. Any project team that has an interest to participate in the CSCE National Capstone Design Competition, please contact the Course Coordinator (Dr. Shawn Kenny). If multiple teams are interested, then an internal competition will be required as each university can only nominate one entry.

#### 2.11.5 CSCE Student Paper Competition

The CSCE Student Paper Competition is an annual student competition that "…takes place during the CSCE Annual Conference in the summer. It recognizes the top student papers submitted and presented at the conference. Application deadline is the same as the conference abstract deadline set by the conference."

### 2.12 Academic dates

Students should be aware of the academic dates (e.g., last day for academic withdrawal) posted on the Registrar's office web site.

### 2.13 Graduate Attributes

The Canadian Engineering Accreditation Board (CEAB) defines design as "…an ability to design solutions for complex, open-ended engineering problems and to design systems, components or processes that meet specified needs with appropriate attention to health and safety risks, applicable standards, and economic, environmental, cultural and societal considerations…."
As part of the CEAB accreditation process we will measure and assess graduate attributes (i.e., technical, professional, and personal attributes) we seek to develop and refine throughout your undergraduate engineering program. The graduate attributes are evaluated using defined rubrics focused on teaching and learning outcomes. The graduate attribute assessment does not influence your grade assessment as defined in the course syllabus. The graduate attributes are measured and analyzed as part of the Civil and Environmental Engineering program improvement.

The Canadian Engineering Accreditation Board (CEAB) requires graduates of undergraduate engineering programs to possess 12 graduate attributes (GAs). Courses in all four years of our programs evaluate students' progress towards acquiring these GAs. 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 table summarizes the GAs targeted by this course, which relate to the Learning Outcomes, and the assessment tool used to measure the respective GA.

| **GA Indicator** | **Assessment Tool** |
| --- | --- |
| <u>GA 4 Design</u> | |
| 4.1 Clear design goals | M2: Conception Report [1] |
| 4.2 Detailed design specifications and requirements | M6: Final Report |
| 4.4 Design solution(s) | M6: Final Report |
| 4.5 Design implementation/task(s) definition | M6: Final Report |
| 4.6 Alternate solution(s) definition | M2: Conception Report |
| 4.7 Evaluation based on engineering principles | M3: Feasibility Report |
| <u>GA 5 Use of engineering tools</u> | |
| 5.1 Diagrams and engineering sketches | M6: Final Report |
| 5.2 Document-processing and graphic packages | M6: Final Report |
| 5.3 Tools for design, experimentation, simulation, visualization, and analysis | M6: Final Report |
| 5.4 Information from relevant publications | M2: Conception Report |
| 5.5 Limitations of such tools and the assumptions inherent in their use | M6: Final Report |
| <u>GA 6 Individual and team work</u> | |
| 6.1 Personal and group time management | M6: Final Report |
| 6.2 Group culture, group dynamics | M6: Final Report |
| 6.3 Leadership: initiative and mentoring, areas of expertise, and interdisciplinary teams | M6: Final Report |

| GA Indicator | Assessment Tool |
| --- | --- |
| <u>GA 7 Communication skills</u> | |
| 7.1 Instructions | M6: Final Report |
| 7.2 Professional Documents: Writing, Design Notes, Drawings, Attributions, and References | M6: Final Report |
| 7.3 Oral and written presentations | M5: Final Presentation<br>M6: Final Report |
| <u>GA 11 Economics and project management</u> | |
| 11.2 Engineering economics | M3: Feasibility Report |
| 11.4 Risk and change management | M3: Feasibility Report |
| 11.5 Project definition and management techniques | M2: Conception Report |
| <u>GA 12 Life-long learning</u> | |
| 12.3 Information from relevant publications | M6: Final Report |

[1] Refer to Section 2.7.3 for a discussion on the course milestones (M1 through M6).

Accreditation units (AUs) are used to grant academic credit that measure curriculum content and contact time with respect to the five components of math, natural science, complementary studies, engineering science and engineering design. One AU represents 1 lecture hour contact or 2 lab/tutorial/PA session contact hours. The following table summarizes the accreditation units (AUs) for this course ACSE/CIVE/ENVE 4918.

| Math | Natural Science | Complementary Studies | Engineering Science | Engineering Design |
| --- | --- | --- | --- | --- |
| 0% | 0% | 25% | 0% | 75% |

# 3 Academic Integrity and Plagiarism

The Carleton University Academic Integrity Policy addresses the expected behaviour of students with respect to academic integrity, which is essential to the university environment. This policy reflects the values we hold to be important in the pursuit of engagement, learning, and scholarship. Violations of this policy can have a range of repercussions and outcomes (e.g., resubmission of work, change in grade, withdrawal from course(s), suspension).

Consult the Faculty of Engineering and Design information page about the Academic Integrity policy and our procedures. 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.

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. Some 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 by not including proper citations when using another's work and/or failing to use quotations marks.

# 4 Copyright

All course materials (e.g., course outline, posted resources, lectures slides, notes, videos assignments, quizzes, exams, and corresponding solutions) are provided under copyright© for personal use (academic study) only. Reproduction, distribution, or transmittal of course materials by any means, without explicit documentation expressing allowance from the copyright holder is a violation of copyright law. This action is an academic offence of the Academic Integrity Policy of Carleton University and Code of Conduct (Category 2 Offence). If you have any questions about fair dealing and your rights to use work for educational purposes, please contact copyright@carleton.ca.

# 5 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. We will strive to create an environment of mutual respect for all through equity, diversity, and inclusion within this course. The space which we work in will be safe for everyone. Please be considerate of everyone's personal beliefs, choices, and opinions.

# 6 Academic Accommodations

### 6.1.1 Overview

Carleton University is committed to providing access to the educational experience that promotes academic accessibility for all individuals.

Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate diversity and difference. The purpose of accommodation is to enable students to perform the essential requirements of their academic programs. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the University.

### 6.1.2 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 .

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).

### 6.1.3 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 the Senate Policy on Accommodation for Student Activities (PDF).

### 6.1.4 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).

### 6.1.5 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).

### 6.1.6 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.

## 7 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. The Department of Civil and Environmental Engineering (CEE) also has Academic Advisors that you may need to contact.

## 8 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 may contact a CEE Departmental Administrator, Academic Advisor or the Associate Chair of Undergraduate Studies.

The following list provides additional on-campus and off-campus resources:

1. **Carleton's Wellness Desk**: Located at 204A MacOdrum Library, 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/
2. **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. https://carleton.ca/health/
3. **Residence Counselling and Wellness Service:** Counselling services specifically for students in residence. https://carleton.ca/health/residence-counselling/
4. **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://carleton.ca/wellness/dogs/
5. Emergencies and Crisis and Emergency Numbers
6. **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, 24/7/36 https://good2talk.ca/
7. **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 https://students.carleton.ca/services/empower-me-counselling-services/
8. **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-serve 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/

9. **Distress Centre of Ottawa and Region**: Available 10am-11pm, 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/
10. **Distress and Crisis Ontario**, Available for chat 2 pm – 2 am EST. https://www.dcontario.org/
11. **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 General Carleton University Policies

This section summarizes other key university and course policies. As a student you must be aware of and follow the regulations of Carleton University for academic behaviour and understand your rights and responsibilities for non-academic behaviour.

## 9.1 Academic petition and appeal of grade

For extenuating circumstances that affect your ability to meet your academic obligations, you have the option to submit a petition.

Before initiating the Appeal of Grade process, seek resolution through communication with (1) the assigned Teaching Assistant (TA), and, if the issue remains unresolved, (2) the Primary Evaluator based on Table 3 § Course Evaluation.

## 9.2 Additional student resources

From Intention to Action – Supports undergraduate and graduate students in the often-stressful university experience. We help students to better manage stress and improve their academic performance, by navigating the personal stressors that can often get in the way of school.

International Students – offers services and programs that contribute to positive international experiences for all Carleton students.

Peer Assisted Study Sessions – offers free, course-specific study sessions known as Peer Assisted Study Sessions (PASS). PASS is a learning enhancement program that is attached to historically challenging courses. PASS is a peer-to-peer program which provides a welcoming and supportive environment where students work through course content and learn transferable study skills that they can apply to other courses.

Student Experience Office – facilitate student-centered learning that enhances the university experience by offering transition support, leadership opportunities, and experiential learning resources to enhance university experience.

Writing Service – offers equitable access to writing support services for the Carleton community.