The main learning objectives of this course are the following: introduce students to material science (atom structure, crystallography, imperfections); and to discuss the characteristics, properties, behaviour, and use of Civil Engineering materials (steel, concrete, asphalt, wood, polymers and composites). The course will consider their specifications, physical, chemical, thermal and mechanical properties. The students will also learn about fatigue and corrosion of metals.

Instructor: Dr. John Gales
Office: 4206 Canal Building
Office hours: Open door policy (or by appointment).
Email: john.gales@carleton.ca
When emailing the instructor/teaching assistants type “CIVE2700-Course query” as your subject header and use your Carleton university account only. Only emails following this procedure will be given responses. Course feedback at any time is welcomed.

Section A;
Lectures: Tuesday and Thursday 11:35am-12:55 pm
Lecture room: ME 3275
Tutorial time: Thursday 235 -355
Tutorial room: AT 302
Limited seating only attend your section

Section B;
Lectures: Wednesday and Friday 1:05pm-2:25 pm
Lecture room: ME 4499
Tutorial time: Friday 1135 -1255
Tutorial room: AT 302

Teaching Assistants: They will be announced in lecture.
Teaching Assistants office hours: They will be announced in lecture.

Textbook:

Website:
- Lecture notes, supplementary reading notes, laboratory notes, assignments and solutions will be available on-line at CULearn.
Evaluation:

- Assignment 1: 5%
- Assignment 2: 5%
- Lab report 1: 5%
- Lab report 2: 5%
- Midterm: 30%
- Final Exam: 50%

General Policies

- Attend the section (A or B; ATU and BTU) in which you are registered. Switching between sections or attending the wrong section is not permitted.
- Switching between labs (L1-L14) or between tutorial sessions is not permitted.
- Photography, movie making, or voice recording during class by any means is not permitted without my permission.
- The notes supplied on the website are intended to serve as complement and not replacement to regular class attendance. They will not be made available online after the term’s December final exam. Lectures may be supplied as PDFs. Due to the proprietary nature of some content some slides may be absent, ppt slides will not be supplied online. Students are expected to regularly utilise cuLearn to obtain course materials as they are published. cuLearn downtime will have no effect on course deliverables.
- The schedule of the topics covered may not be exactly as shown in the course weekly calendar. The instructor may alter the course weekly calendar and schedule slightly during the term. The up to date outline will be posted on cuLearn.
- Marked course work will be returned only during class. If you miss picking up the material during one class it will be made available to you in the next two classes.
- Labs should be typed, but assignments may be hand written, however all those that are intelligible/messy may be at the professor’s or Teaching Assistant’s discretion be given a score of zero.
- In-class room, tutorials and/or office hours are expected to be a scent free zone. The chemicals used in scented products can make some people sick, especially those with fragrance sensitivities, asthma, allergies, and other medical conditions. Do not wear excessive cologne, aftershave, and other fragrances etc.

Late policy
All students are expected to complete their coursework (labs, assignments etc) in a timely fashion. All late assignments and lab reports should be given to the instructor. Late assignments and lab reports will be subject to a reduced grade of 20% of the maximum grade per day late (where weekends will also count as two days). A mark of zero will be applied if the assignment is submitted after the solutions have been posted.

Annual CIVE 2700 Summer Internship
The student with the highest final exam mark will be offered a paid summer research assistant placement in Toronto. This may count as a co-op placement. The internship typically involves travel abroad to meet with international firms and research institutes. Short placements in renowned international engineering firms are also conducted. In the event of a tie, the student with the highest overall mark will be offered the position.

Review of Marks
All appeals of marks for assignments, lab reports and mid-term exam must be made within one week from the day of posting of results and submitted to the appropriate TA (for assignments and laboratories) or to the instructor (for mid-terms).
The final examination is for evaluation purposes only, and the paper will not be returned or made available to students after it is marked. Each exam is checked three times for accuracy.

All course mark appeals will be addressed via email as it allows time for reflection. Appeals will not be done by in-person-meeting.

**Laboratories**

Students are expected to conduct their labs in a safe and professional manner. You will be briefed on the potential hazards and steps to mitigate any risk by a Technician or Teaching Assistant within the first five minutes of the lab. If you have any doubt about anything related to your safety or another’s safety, immediately ASK the technician or teaching assistant. Students must supply and wear their own Personal Protective Equipment consisting of Canadian Standards Association approved safety footwear (purchasable at Marks Work Wear house for example). Safety glasses and gloves will be provided and required to be permitted to complete a required laboratory part of this course. All labs are to be typed, those which are intelligible will be given a score of zero. Attendance to all labs (including submitting lab reports and lab components) is mandatory and a requirement for a passing grade.

Absence to labs must be accompanied by a formal and valid explanation within 24 hours of said absence (valid doctor’s notes must follow [http://carleton.ca/registrar/wp-content/uploads/med_cert.pdf](http://carleton.ca/registrar/wp-content/uploads/med_cert.pdf) and by using said note, permission is given to the professor to inquire to its validity). It will be the student’s responsibility to catch up on the material missed by speaking with classmates.

Being late for the lab by more than 5 minutes will be considered as absent and students will not be admitted into the lab beyond that time. (Helpful hint: Bus 7 is always late best to plan for it).

Lab safety is discussed within the first 5 minutes.

**Midterm Exam**

The midterm is tentatively scheduled during Week 7 during the tutorial session.

If you miss the mid-term examination (or leave the examination), due to documented illness, or if you miss the mid-term examination due to prior arrangement as documented with approval as legitimate from me, the 30% will be added to the weight of your final exam. Otherwise, your mark will be zero. There will be no alternative dates scheduled.

If you attend the wrong midterm session a mark of zero will be applied.

A poor midterm mark cannot and will not be differred to the final exam.

If you leave the midterm examination after 25 minutes, the midterm will be graded and that mark will be applied.

Absence to midterm(s) must be accompanied by a formal and valid explanation within 24 hours of said absence (valid doctor’s notes must follow [http://carleton.ca/registrar/wp-content/uploads/med_cert.pdf](http://carleton.ca/registrar/wp-content/uploads/med_cert.pdf) and by using said note, permission is given to the professor to inquire to its validity, it is the professors discretion whether the doctors note is valid). Failure to provide valid documentation per above will result in a score of 0 on the midterm.

Students will be assigned a grade of FND (Failure - No Deferred) if their written mid-term mark is below 20%.
Final Grade
The date for the final exam will be announced by the university. To pass the course, a minimum mark of 50% on the final exam is required. Final exam marks (and final grades) will not be posted on cuLearn. Final grades can be found on Carleton Central after the dean has approved the marks.

Deferral Exam
In addition to university policies on granting a deferral final exam, the granting of a deferral final exam in CIVE 2700 also requires that the student has performed satisfactorily in the course according to the evaluation scheme established in this Course Outline, excluding the final examination for which deferral privileges are requested. Reasons for denial of a deferral may include, among other conditions, a failure to (i) achieve a minimum score on the midterm before the final examination (a minimum mark of 20%); (ii) attend a minimum number of classes where attendance is recorded (a minimum recorded census score of 50%); (iii) complete laboratory work (attend and submit all labs); or (iv) meet other reasonable conditions of successful performance.

Academic Integrity
Students are expected to attend all lectures, tutorials, laboratories, and observe standards of behaviour expected in a university environment and in the profession of engineering. See the institutional academic integrity policy: http://carleton.ca/senate/wp-content/uploads/Academic-Integrity-Policy1.pdf.

Student Reference Letters
Letters of reference for employment, internship, volunteering and/or professional networking endorsements (linkedin, twitter, Instagram etc) will be offered only to the person achieving the highest midterm mark, highest exam mark, highest overall mark, and/or largest improvement in grade.

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

Pregnancy obligation
Write to me 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 visit the Equity Services website: http://www2.carleton.ca/equity/.

Religious obligation
Write to me 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 visit the Equity Services website: http://www2.carleton.ca/equity/.

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. The letter of accommodation cannot be initiated later than three weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, it is your responsibility to meet with me to ensure
accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for formally scheduled exam (if applicable) at http://www2.carleton.ca/pmc/new-and-current-students/dates-and-deadlines/

You can visit the Equity Services websites to view policies and to obtain more detailed information on academic accommodation at http://www2.carleton.ca/equity/.

Copy-right
Lectures and course materials, including power point presentations, outlines, and similar materials, are protected by copyright. The instructor is the exclusive owner of copyright and intellectual property in the course materials. You may take notes and make copies of course materials for your own educational use. You may not and may not allow others to reproduce or distribute lecture notes and course materials publicly for commercial and non-commercial purposes without my express written consent. If it can be shown that these terms were violated by you, your grade can be changed to an FND even after the course is completed.

NETiquette
In all online communications (e.g., email, online discussion, or other forms of online communications), please consider the guidelines from the Core Rules of Netiquette by Virginia Shea (http://www.albion.com/netiquette/corerules.html). Sometimes, online behaviour can appear to be inappropriate or disrespectful that it requires attention and follow up. In this case, please make sure you let your instructor know immediately so that the right resources can be identified to help.

Classroom Etiquette
Class attendance is only meaningful if students arrive on time in class. The use of electronic devices (smart-phones, tablets, etc.) during lectures and tutorials is only permitted for education purposes.