



# ENGG\*1070 Occupational Health and Safety

Fall 2018

Section(s): C01

School of Engineering

Credit Weight: 0.25

Version 1.00 - September 06, 2018

## 1 Course Details

### 1.1 Calendar Description

This course presents the legal implications of occupational health and safety as expressed in the Environmental and Occupational Health and Safety Act, and exposes students to methodologies designed to ensure compliance with the Act. The course stresses safety initiatives and deals with specific safety issues such as noise levels, biosafety, hazardous waste management, safety in the workplace, radiation safety and industrial safety.

**Restriction(s):** Registration in the B.Eng. Program

### 1.2 Timetable

Lectures:

Mon, Wed 3:30pm - 4:20pm ALEX, Room 100

Lecture Schedule:

Lecture	Lecture Topics	Textbook	Learning Objectives
Mon Sept 10	Introduction	Ch 1, 2, 3	1, 3
Wed Sept 12	OHS Act	extra	1, 2, 3
Mon Sept 17	Hazards in the Workplace	Ch 9	3, 4, 5, 6, 7
Wed Sept 19	Tools and Machines	Ch 13	4, 5, 6, 7
Mon Sept 24	Working at Heights	extra	4, 5, 6, 7
Wed Sept 26	Electrical Safety	Ch 12	4, 5, 6, 7
Mon Oct 1	Transportation Safety	Ch 14	4, 5, 6, 7
Wed Oct 3	Fire Protection	Ch 16	4, 5, 6, 7
Wed Oct 10	Midterm1	N/A	
Mon Oct 15	Heat & Cold	Ch 18	4, 5, 6, 7
Wed Oct 17	Non-ionizing Radiation	Ch 21	4, 5, 6, 7
Mon Oct 22	Ionizing Radiation	Ch 22	4, 5, 6, 7
Wed Oct 24	Noise	Ch 23	4, 5, 6, 7
Mon Oct 29	BioHazards	Ch 26	4, 5, 6, 7
Wed Oct 31	Hazardous Waste	Ch 27	4, 5, 6, 7
Mon Nov 5	Ventilation	Ch 25	4, 5, 6, 7
Wed Nov 7	Midterm2	N/A	

Mon Nov 12	Chemicals	Ch 24	4, 5, 6, 7
Wed Nov 14	Ergonomics	Ch 33	4, 5, 6, 7
Mon Nov 19	Confined & Restricted Spaces	extra	4, 5, 6, 7
Wed Nov 21	PPE	Ch 28	4, 5, 6, 7
Mon Nov 26	Safety Inspection	extra	3
	Final Review	N/A	-

**Disclaimer:**

The instructor reserve all right to change any or all of the above in the event of appropriate circumstances, subject to the University of Guelph academic regulations.

## 1.3 Final Exam

Wednesday Dec 12, 2:30 am - 4:30 pm, Room TBA on Webadvisor

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## 2 Instructional Support

Instructor: Amin Komeili, Ph.D., PEng  
Office: Richards Building Rm. 1509  
Email: akomeili@uoguelph.ca  
Office hours: TBA on Courselink or by appointment

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## 3 Learning Resources

- CourseWebsite

Course material, news, announcements, and grades will be regularly posted to the ENGG\*1070 Courselink site. You are responsible for checking the site regularly.

- Required Resources

Brauer, R., Safety and Health for Engineers, 3th edition, Wiley, 2016.

- Resources on Reserve

Brauer, R., Safety and Health for Engineers, 1th edition, Van Nostrand Reinhold, 1990.

- Additional Resources

1. Lecture Information: All the lecture notes are posted on CourseLink. The lecture is the primary source of information for the course and certain topics will be more elaborated than presented in the text book. Discussion and Examples that may not be available from the text book and posted lecture slides will also be presented during the lecture time to help you further understand the subject matter of the various topics. As such it is highly recommended that you attend the lectures.

2. Miscellaneous Information: Other information related to the course will be posted on the web page.

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## **4 Learning Outcomes**

### **4.1 Course Learning Outcomes**

By the end of this course, you should be able to:

1. This course will provide an introduction to occupational health and safety legislation, workplace hazards, and the administration of organizational health and safety practices. By the end of this course, you should be able to:
    1. Explain the importance of occupational health and safety.
    2. Demonstrate an understanding of occupational health and safety legislation and standards in Ontario.
    3. Understand the duties and responsibilities of the workplace parties in reporting and investigating incidents.
    4. Identify, categorize, and discuss the various sources of workplace hazards and determine how to mitigate these hazards through engineering controls, administrative controls and personal protective equipment.
    5. Analyze and illustrate the factors that contributing to incidents.
    6. Explain methods and controls to prevent specific occupational safety and health calamities.
    7. Compare the strategies and methods used to evaluate occupational safety and health.
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## **5 Teaching and Learning Activities**

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## **6 Assessments**

Dates and Distribution:

Assignments: 10%

Date:TBA on Webadvisor

Term Test 1: (15%) Oct 10 3:30am - 4:20pm, in class

Term Test 2: (15%) Nov 7 3:30am - 4:20pm, in class

Final Exam: 60%

Wed Dec 12, 2:30 pm - 4:30 pm, Room TBA on Webadvisor

Course Grading Policies:

If you are unable to meet an in-course requirement due to medical, psychological, or compassionate reasons, please email the course instructor. See the undergraduate calendar for information on regulations and procedures for Academic Consideration:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Accommodation of Religious Obligations: If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements. See the undergraduate calendar for information on regulations and procedures for Academic Consideration of Religious Obligations:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-accomrelig.shtml>

Missed term test: If you miss any of term tests due to grounds for granting academic consideration or religious accommodation, the weight of the missed term test will be added to the final exam weight. There will be no makeup term test.

Late Assignments: Late submissions of assignments will not be accepted.

Passing Grade: As per University policy, the minimum passing grade is 50%.

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## **7 School of Engineering Statements**

### **7.1 Instructor's Role and Responsibility to Students**

The instructor's role is to develop and deliver course material in ways that facilitate learning for a variety of students. Selected lecture notes will be made available to students on Courselink but these are not intended to be stand-alone course notes. Some written lecture notes will be presented only in class. During lectures, the instructor will expand and explain the content of notes and provide example problems that supplement posted notes. Scheduled classes will be the principal venue to provide information and feedback for tests and labs.

### **7.2 Students' Learning Responsibilities**

Students are expected to take advantage of the learning opportunities provided during lectures and lab sessions. Students, especially those having difficulty with the course content, should also make use of other resources recommended by the instructor. Students who do (or may) fall behind due to illness, work, or extra-curricular activities are advised to keep the instructor informed. This will allow the instructor to recommend extra resources in a timely manner and/or provide consideration if appropriate.

### **7.3 Lab Safety**

Safety is critically important to the School and is the responsibility of all members of the School: faculty, staff and students. As a student in a lab course you are responsible for taking all reasonable safety precautions and following the lab safety rules specific to the lab you are working in. In addition, you are responsible for reporting all safety issues to the laboratory

supervisor, GTA or faculty responsible.

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## 8 University Statements

### 8.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

### 8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The regulations and procedures for [Academic Consideration](#) are detailed in the Undergraduate Calendar.

### 8.3 Drop Date

Courses that are one semester long must be dropped by the end of the fortieth class day; two-semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for [Dropping Courses](#) are available in the Undergraduate Calendar.

### 8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

### 8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: [www.uoguelph.ca/sas](http://www.uoguelph.ca/sas)

### 8.6 Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an

environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The [Academic Misconduct Policy](#) is detailed in the Undergraduate Calendar.

## **8.7 Recording of Materials**

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

## **8.8 Resources**

The [Academic Calendars](#) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

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