

University of Toronto Scarborough  
Department of Physical and Environmental Sciences  
EESA05H3 F - Environmental Hazards  
2013 Outline

Professor: Mandy Meriano  
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Lecture time: Tuesday 7 pm to 10 pm  
Location: SY110

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**Required textbook:** Abbott, P.L. and Samson, C. 2012. Natural Disasters, 2nd Canadian Edition. McGraw-Hill Ryerson Limited, United States. pp. 422

The course textbook is available from the UTSC Bookstore.

**Description:** This course is an investigation of the geological background and possible solutions to major hazards in the environment. Environmental hazards to be studied include: landslides, erosion, earthquakes, volcanic eruptions, asteroid impacts, flooding, glaciation, future climate change, subsidence, and the disposal of toxic wastes. This may be of interest to a wide range of students in the life, social, and physical sciences and an opportunity for the non-specialist to understand headline-making geological events of topical interest. No prior knowledge of the Earth Sciences is required.

**Learning Objectives:** By the end of the course students will have developed an understanding of environmental hazards. The course aims to give learners a clear conceptualization of the basic issues surrounding the causes, effect and possible management of environmental hazards.

**Marking Scheme:** Four assignments: value 40% (4 x 10%); a midterm exam: value 25% (multiple choice); and a final exam: value 35%.

The midterm is based on material covered in lectures and readings up to and including the class before the midterm exam. The midterm will be multiple choice.

The final exam will be based on all term material (including readings and lectures). The final exam will be multiple choice.

Grade Distribution Summary (percentage of total)	
Assignments (4 @ 10% each)	40
Midterm Exam	25
Final Exam	35
Total Grade Possible	100

**Tentative Course Schedule and Readings:** Readings are from your course textbook: Abbott and Samson (2012).

*Students should note that topics may span more than one lecture period.*

**Week 1: September 03**

An overview of the course, expectations, and objectives  
A quick look at the textbook

- ♣ **Assignment 1** posted on Blackboard
- ♣ **Due:** Tuesday September 24 before 5pm

Introduction to Natural Disasters  
Ch.1

**Week 2: September 10**

Plate Tectonics  
Ch.s 2 and 3

**Week 3: September 17**

Earthquakes  
Chs. 4 and 5

**Week 4: September 24**

Volcanoes and Tectonics  
Chs.6, and 7

- ♣ **Assignment 2** posted on Blackboard
- ♣ **Due:** Tuesday October 8th before 5pm

**Week 5: October 01**

Mass Wasting  
Ch. 13

**Week 6: October 08**

Subsidence and soil expansion/contraction  
Ch.13

- ♣ **Assignment 3** posted on Blackboard
- ♣ **Due:** Tuesday November 5th before 5pm

**October 15: Reading Week – No Class**

**Week 7: October 22**

**Midterm Test** – during class time

**Week 8: October 29**

Tsunamis  
Ch.8

**Week 9: November 05**

Floods  
Ch. 11

- ♣ **Assignment 4** posted on Blackboard
- ♣ **Due:** Tuesday November 26 before 5pm

**Week 10: November 12**

Coastal erosion  
Ch.s 8, 10, and 11

Group Presentations

**Week 11: November 19**

Climate change  
Ch.9

**Week 12: November 26**

Asteroids and mass extinction  
Ch.14

**Assignments:**

**General Information about Assignments**

Google Earth will be introduced and used as a tool in 3/4 of the assignments. The first assignment will include an introduction to Google earth for those unfamiliar with it.

**Grading:** Evaluation of assignments takes into account correctness, organization and structure, as well as research and content. You will be graded on the quality of your work and your ability to meet the desired learning targets. Your work will be graded by teaching assistants (TA). If you have a question or problem with the grade you receive, consult the TA. Your grade may be revised up or down based on the review.

Your assignments must have the title of your assignment, your name, course number, the date, your student number, and the professor's name. Staple your assignment in the upper left corner; do not use folders, cover slips, or binders.

**Due Dates:** The assignments have specifically defined due dates as noted in the Course Schedule. It is your responsibility to consult the Lecture Schedule for all the Assignment and midterm due dates. The instructor will not assume the responsibility of reminding you that an assignment is due or that an exam will be given.

**Grade Posting:** All grades will be posted on Blackboard. *You have 7 days after a grade has been posted to dispute an entry.* After the 7-day period, the grade stands as entered. Do not wait until the end of the semester to check your grades.

**Late assignments:** The late penalty is as follows:  
1 day 10%, 2 day 20%, 3 day 30%, 4 day 40%, 5 day 50%, 6 day and after 100%

Please make sure to submit your assignments before the due time to avoid late penalty.

**Extensions:** Requests for an extension on an assignment must be tendered in writing in advance of the due date. In instances of illness, a supporting medical certificate must be completed by a physician at the University Student Health Centre. Other notes are not acceptable. Extensions are granted at the discretion of the Professor (and the TAs), and may be granted for other significant emergencies.

**Handing In Assignments:** You are responsible for making sure that your TAs receive your work. Students who mail assignments in, place work on the floor outside an office, or slip assignments under a door, do so at their own risk.

**Lost or misplaced assignments:** It is your responsibility to keep a photocopy of your work, and to make more than one disk copy of your work. Excuses are not accepted in the case of lost or misplaced work.

**Class Attendance and Participation:** Students are encouraged to attend class. i>Clicker will be used during lectures to answer multiple choice questions.

**i>clicker User Guides:** <http://www.iclicker.com/support/userguides/>

**Academic Misconduct and Academic Dishonesty** will not be tolerated. Students engaging in misconduct or dishonest practices on exams, quizzes, or other assignments will be dealt with according to the guidelines established by the university.

**Plagiarism:** Please consult the University Calendar for a discussion and outline of the policy on plagiarism and academic integrity (also see proceeding section below). The sanctions can be severe. If, after reviewing the University policy, you are uncertain about what constitutes plagiarism, talk to your course instructor.

**Academic Integrity:** Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

- Using or possessing unauthorized aids.
- Looking at someone else's answers during an exam or test.
- Misrepresenting your identity.

In academic work:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or

appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see <http://www.utoronto.ca/academicintegrity/>).

Please consult the University Calendar for information about grade distribution and academic conduct.

**Help Along the Way:** Many students enter this class with a bit of anxiety. Other students may have various disabilities, including test anxiety, which may make traditional classroom environments very difficult. Fear not, almost all such students before you have actually passed this course – many with very high grades! The success of many of these students, though, was in part because they attended class regularly, took advantage of my office hours, or obtained help from the teaching assistants. If you are having difficulty understanding the course work, please contact me or the teaching assistant immediately. Also, the university has learning centre, accessibility resource centre, and counselling centre to address the various needs of students.

**Accessibility:** Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodation, please feel free to approach me and/or the *AccessAbility* Services Office as soon as possible. I will work with you and *AccessAbility* Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC *AccessAbility* Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or [ability@utsc.utoronto.ca](mailto:ability@utsc.utoronto.ca).

Students are encouraged to review the Calendar for information regarding all services available on campus.