# Course Outline Form: Winter 2016

## General Information

**Course Title:** ENVS\*2250DE **-** The Geology of Natural Disasters

**Course Description:**

|  |  |
| --- | --- |
| This course will offer insight into the mechanisms of natural geological disasters and their effects on Planet Earth, human civilization and life in general. Events before, during and after geological disasters such as earthquakes, volcanic eruptions, meteorite impact and climate change will be the focus of this course. This course will not count as a science credit for B.Sc. students. | |
| *Offering(s):* | Offered through Distance Education format only. |
| *Prerequisite(s):* | 1 of [ENVS\*1050](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12envs.shtml#ENVS1050), [ENVS\*1060](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12envs.shtml#ENVS1060), [GEOL\*1050](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/includes/discontinued.shtml), [GEOL\*1100](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/includes/discontinued.shtml), [GEOG\*1300](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12geog.shtml#GEOG1300),[GEOG\*1350](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c12/c12geog.shtml#GEOG1350) |
| *Equate(s):* | [GEOL\*2250](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/includes/discontinued.shtml) |
| *Department(s):* | School of Environmental Sciences |

**Credit Weight:** 0.50

**Academic Department (or campus):** School of Environmental Sciences

**Campus:** NA

**Semester Offering:** Winter

**Class Schedule and Location:** Distance Education

## Instructor Information

Instructor Name: Steven Sadura

Instructor Email: [sadura@uoguelph.ca](mailto:sadura@uoguelph.ca)

Office location and office hours: ALEX221, office hours by appointment

## GTA Information

GTA Name: Peter Nowell

GTA Email: [pnowell@uoguelph.ca](mailto:pnowell@uoguelph.ca)

GTA office location and office hours: By appointment

## Course Content

**Part 1- Facts about the Earth**

Unit 1 - The Layers of the Earth

Unit 2 - Plate Tectonics

**Part 2 - Disasters from Within**

Unit 3 - Volcanoes

Unit 4 - Earthquakes

**Part 3 - External Disasters**

Unit 5 - Impact Earth

**Part 4 - Disasters at the Earth's Surface**

Unit 6 - Coastal Disasters

Unit 7 - Slope Failures

Unit 8 - River Flooding

**Part 5 - Climate Change**

Unit 9 - Earth's Climate; Past, Present and Future

### Specific Learning Outcomes:

1. Gain practical tools to be able to assess a landscape and its' important geologic and geomorphic components for the purpose of land-use planning. After taking this course, students should know where **NOT** to build a house.

2. Understand important concepts that reflect the complexity of the integrated Earth system (lithosphere, hydrosphere, atmosphere...). Assessment will take place in week 3 (quiz 1) and continue throughout the course.

3. Understand the mechanisms and effects of major geological disasters and where they are most likely to occur on the planet. The assessment of this outcome will take place in week 5, 7 and 9 during quizzes 2-4.

4. Understand and discuss contemporary societal issues relevant to natural geological disasters. The assessment of this outcome will take place during the online discussions throughout the semester but also to some degree during the online quizzes.

5. Ability to effectively communicate scientific ideas and findings to the general public in writing.  
The assessment of this outcome will take place upon completion of the final written assignment (a "mock" newspaper article).

6. Be able to participate before, during and after natural disasters to reduce the impact of these disasters on their communities.

### Lecture Content:

Online notes contain many narrated simulations and videos. Collectively these are called “clips” in the online course notes.

### Labs: None – Distance education

### Seminars: None – Distance education

### Course Assignments and Tests:

| **Assignment or Test** | **Due Date** | **Contribution to Final Mark (%)** | **Learning Outcomes Assessed** |
| --- | --- | --- | --- |
| Quiz1 | Sun. Jan. 31, 11:59 pm | 8 | 1-3 |
| Quiz2 | Sun. Feb. 14, 11:59 pm | 8 | 1-3 |
| Quiz3 | Sun. Mar. 6, 11:59 pm | 8 | 1-3 |
| Quiz 4 | Sun. Mar. 20, 11:59 pm | 8 | 1-3 |
| Assignment | Sun. Apr. 3, 11:59pm | 10 | 4-5 |
| Participation | Fri, Apr. 8 (last class day) | 8 | 5-6 |
| Final Exam | Wed. Apr. 20, 8:30-10:30am  Location: TBA | 50 | 1-4 |

Additional Notes (if required):

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

**Final examination date and time:** Wed. Apr. 20, 8:30-10:30am

### Final exam weighting: 50%

## Course Resources

### Required Texts:

Abbott, P.L., 2014*.* Natural Disasters***,*** 9th Edition.

On Library reserve. Call number GB5014 .A24 2014

### Recommended Texts: None

### Lab Manual: None

### Other Resources:

Online course notes with embedded videos and animations to explain dynamic processes (those with motion)

Online Glossary (accessed through the course website,D2L)

### Field Trips: None

### Additional Costs: None

## Course Policies

### Grading Policies:

**Do not submit quizzes or assignments after the due date without express permission from your instructor or T.A. Failure to inform us will result in a mark of zero.**

### Course Policy on Group Work:

Students may work collaboratively on the quizzes (and true collaboration is encouraged). Do not simply copy the work of others because you won't learn much. The quizzes are carefully designed to help you read through and understand the course material. If you do well on these, you should do well on the final exam.

### Course Policy regarding use of electronic devices and recording of lectures: NA

## University Policies

### Academic Consideration:

The University of Guelph is committed to supporting students in their learning experiences and responding to their individual needs and is aware that a variety of situations or events beyond the student's control may affect academic performance. Support is provided to accommodate academic needs in the face of personal difficulties or unforeseen events in the form of Academic Consideration.

Information on regulations and procedures for Academic Consideration, Appeals and Petitions, including categories, grounds, timelines and appeals can be found in [Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml).

### 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.

Detailed information regarding the Academic Misconduct policy is available in [Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml).

### Accessibility:

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Student Accessibility Services (SAS), formerly Centre for Students with Disabilities (CSD), as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or visit the [Student Accessibility Services website (http://www.uoguelph.ca/csd/)](http://www.uoguelph.ca/csd/).

### Course Evaluation Information:

End of semester course and instructor evaluations provide students the opportunity to have their comments and opinions used as an important component in the Faculty Tenure and Promotion process, and as valuable feedback to help instructors enhance the quality of their teaching effectiveness and course delivery.

While many course evaluations are conducted in class others are now conducted online. Please refer to the [Course and Instructor Evaluation Website](https://courseeval.uoguelph.ca/) **for more information.**

### Drop period:

The drop period for single semester courses starts at the beginning of the add period and extends to the Fortieth (40th) class day of the current semester (the last date to drop a single semester courses without academic penalty) which is listed in [Section III (Schedule of Dates) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/).

The drop period for two semester courses starts at the beginning of the add period in the first semester and extends to the last day of the add period in the second semester.

Information about Dropping Courses can be found in [Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/).

## Additional Course Information: None