

	<p><i>School of Arts &amp; Science</i>  <b>SOCIAL SCIENCES DEPARTMENT</b></p> <p><b>GEOG 111-001</b>  <b>Natural Hazards</b>  <b>Winter 2015</b></p>
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## COURSE OUTLINE

### 1. Course Description

This course will provide students with a first exposure to physical geography through the lens of natural hazards: environmental processes that threaten human health and property. Topics will include natural and human systems that create hazard and risk, earthquakes and related phenomena, volcanoes, landslides and avalanches, coastal and river hazards, and atmospheric hazards. Lab exercises will introduce technical skills related to hazard assessment and mitigation. An emphasis on current events will be maintained. This course is intended for both science and non-science majors.

My classes tend to be quite informal, and I encourage participation and discussion. My goal is to have you think and understand, so please speak up if you are confused! Group work is encouraged, and you should help each other learn. But this does not mean you can copy! Each student must do their own individual assignment reports, and if I catch people copying, all parties involved will get a mark of zero.

**Note: The official Approved Course Description is available on the web at <http://camosun.ca/learn/calendar/current/web/geog.html>**

- *Please note: this outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.*

### 2. Instructor Information

Instructor:	Chris Ayles
Office Hours:	Mon - Fri approximately 11:30-12:30, minus some lunch time. Other times available by chance or appointment.
Location:	Fisher 342C
Phone:	370-3393
Email:	<a href="mailto:cayles@camosun.bc.ca">cayles@camosun.bc.ca</a>
Website:	<a href="http://faculty.camosun.ca/chrisayles">faculty.camosun.ca/chrisayles</a>

### 3. Intended Learning Outcomes

At the end of the course students will be able to:

1. Describe the natural environmental processes that underlie natural hazards.
2. Explain how human development and planning influence natural hazard risk.
3. Acquire some basic risk assessment and mitigation tools related to natural hazards.

#### 4. Course Materials

(a)	Text	<p><u>Required:</u> Keller, E.A., D.E. DeVecchio and J.J. Clague, 2015. <i>Natural Hazards, 3rd Canadian Edition</i>. Toronto: Pearson Education Canada, 504 pp.</p> <ul style="list-style-type: none"><li>This is available in the book store, and there also will be a reserve copy in the library.</li></ul>
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#### 5. Course Content and Schedule

- Lectures:** This class has two two-hour blocks on Wednesdays (in room Dental 015) and Fridays (in Fisher 338). Attendance is essential. I will post basic lecture outlines on my web site: [faculty.camosun.ca/chrisayles](http://faculty.camosun.ca/chrisayles). These outlines are no substitute for coming to class! You will need to complete them by taking notes during class, and keeping up with textbook reading assignments.
- Readings** are an essential part of this course – they provide depth and context that are indispensable to your understanding of the course material, and they will be tested. Specific reading assignments are detailed below; these may be modified as the term goes on.

**Assignments:** There are eight labs and one library assignment. You may work with others, but each student must write their own individual answers unless instructed otherwise.

There are eight labs. You will be able to download these from the course web site. Time to work on labs will be provided on Fridays. Attendance of labs is very important. No credit will be given for wrong answers or missed activities due to unexcused absence from lab. Printed copies of answers are generally due a week after the lab period. I reserve the right to impose a 10% per day penalty on late assignments. Late assignments will not be accepted after I have returned them marked.

You will also be expected to attend a library research skills workshop and complete an assignment given by the librarian. This will help you with your poster project (see below).

- Poster Project:** Working in pairs, each student will be responsible for researching and assembling a hazard-related poster, to be presented in class during a poster session. Failure to present a completed poster on the appointed day will result in a mark of zero for the assignment.
- Field Trip:** In the second half of the term, there will be a mandatory field trip to the Emergency Management BC headquarters in Saanich. You must attend and take notes, to be handed in at the end of the trip. Transportation details will be arranged in class.
- Exams:** There will be a midterm and a final exam. The format for these will be a combination of multiple choice, short answer and long answer questions. They mainly will emphasize the lecture material, though lab material will also be drawn upon. The final exam will be cumulative.
- Illness, etc.:** If you miss a lab or exam due to illness or some other serious reason, I must ask you to provide a doctor's note or other documentation to support your story. Otherwise, a mark of zero for the missed assignment will be given. Exams and field trips are hard to reschedule, so try not to miss them unless you are too sick to perform at a normal level.

Students who miss an exam for a valid reason must contact me within 24 hours with an explanation. In such cases, one makeup exam time will be scheduled, and all students needing it will be expected to attend.

- **COURSE SCHEDULE** (Subject to change at instructor's discretion):

<u>Week of</u>	<u>Wednesday</u>	<u>Friday</u>
Jan. 5	Course Intro	Hazard Systems 1 <i>Reading: Ch. 1</i>
Jan. 12	Hazard Systems 2 <i>Reading: Ch. 2</i>	Lab 1: Topographic Maps
Jan. 19	Earthquakes <i>Reading: Ch. 3</i>	Lab 2: Earthquakes
Jan. 26	Tsunamis <i>Reading: Ch. 4</i>	Lab 3: Tsunamis
Feb. 2	Coastal Hazards <i>Reading: Ch. 12</i>	Lab 4: Coastal Hazards <b>Meet in computer lab</b>
Feb. 9	Library Research Skills Workshop <i>Location TBA</i>	<b>Reading Break - No Class</b>
Feb. 16	Volcanoes <i>Reading: Ch. 5</i>	<b>Midterm Exam</b>
Feb. 23	Landslides <i>Reading: Ch. 6 (Ch. 7 optional)</i>	Lab 5: Landslides
Mar. 2	Floods <i>Reading: Ch. 9</i>	Lab 6: Floods
Mar. 9	Severe Weather <i>Reading: Ch. 10, 11</i>	Lab 7: Storms
Mar. 16	Drought and Wildfire <i>Reading: Ch. 13</i>	Lab 8: Wildfire <b>Meet in computer lab</b>
Mar. 23	Biohazards <i>Reading: TBA</i>	<b>Poster Session</b>
Mar. 30	Climate Change <i>Reading: pp.239, 241, Ch. 10</i>	<b>Easter Friday - No Class</b>
Apr. 6	<b>EMBC Field Trip</b> Details TBA	Review for final exam
Exam Week	<b>Final Exam</b>	

## 6. Basis of Student Assessment

Evaluation will be based on accuracy, thoroughness, and neatness. When I grade your work, I am looking for proof of your understanding, so do everything clearly and carefully – that way you may get partial credit, even for wrong answers. As a general rule, always show your work and keep track of units of measure! I endeavour to mark things fairly and consistently, but if you have a question about my assessment, feel free to ask about it.

(a)	Labs	32% (4% each)
(b)	Library Exercise	1%
(c)	Field Trip Notes	2%
(b)	Poster Project	15%
(c)	Midterm exam	20%
(d)	Final exam	30%

## 7. Grading System

### Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

## Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at [camosun.ca](http://camosun.ca) or information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at [camosun.ca](http://camosun.ca) for information on conversion to final grades, and for additional information on student record and transcript notations.

## 8. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

### LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services or the College web site at [camosun.ca](http://camosun.ca).

### STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services and on the College web site in the Policy Section.