

School of Arts & Science SOCIAL SCIENCES DEPARTMENT GEOG 100

Environment and Sustainability W/17

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/geog.html

 Ω Please note: the College electronically stores this outline for five (5) years only. It is **strongly recommended** you keep a copy of this outline with your academic records. You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

| (a) | Instructor: | Tim Elkin | |
|-----|---------------|------------------|--|
| (b) | Office Hours: | Tues 12.30-1.20; | Wed 2.30-3.20, Thurs 12.30-1.20; Fri 11.30-12.20 |
| (c) | Location: | E238 | |
| (d) | Phone: | 3115 | Alternative Phone: |
| (e) | Email: | elkint@camosun.c | a |
| (f) | Website: | | |

2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

Upon completion of this course the student will be able to:

- Demonstrate a knowledge of ecological systems and the impact of human activity on those systems.
- 2. Demonstrate an understanding of key environmental issues.
- 3. Demonstrate a knowledge of courses of action which address environmental concerns.

3. Required Materials

The required text for the course is Raven, Berg and Hassenzahl, 2015, <u>Environment (9th edition)</u>, Toronto: Harcourt [although the earlier edition text (8th, 2012) is acceptable; there will be some differences].

Several required readings are indicated in the topic outline below. These readings, along with the labs, are available in the **course manual**. Students should purchase the **course manual** from the bookstore.

4. Course Content and Schedule

(This section can include: class hours, lab hours, out of class requirements and/or dates for quizzes, exams, lectures, labs, seminars, practicums, etc.)

INTRODUCTION

Week starting

Jan 9- Introduction to the course

Week1 The Environment: What is the problem?

Lab: Geography of pollution

Class discussion: Human impact on the environment.

What are the most important environmental problems facing us today?

THEME: UNDERSTANDING THE HUMAN RELATIONSHIP WITH THE ENVIRONMENT

Jan 16- Introducing environmental science and sustainability

Week 2 Text: Chap 1

Class discussion 1: Recognizing ecological limits

Should Canadians recognize ecological limits and reduce their ecological

footprint?

Class discussion 2: Scientific assessment, risk analysis and the precautionary principle: Examining risks associated with major projects such as oil development.

Lab: Environmental science: research and the scientific method; geography of environment; human impact on the environment; measuring ecological footprints

Is oil sands development in Alberta an acceptable risk?

Video: H2Oil

Jan 23- Addressing environmental problems: Policy, economics and

Week 3 worldviews

Text: Chap 2

Lab: Addressing environmental problems: Policy and economics;

worldviews.

Video: Subdue the Earth

Class discussion: Addressing environmental problems

How 'green' is the Camosun campus? What environmental problems exist on the

Camosun campus? What solutions can you identify to these problems?

THEME: UNDERSTANDING THE ENVIRONMENT

Jan 30- Ecosystems and Energy

Week 4 Text: Chap 3

Lab: Ecosystems and Energy

Class discussion: Whaling.

Is whaling an unacceptable practice that should be stopped immediately?

Video: Whale Mission

Feb 6- Quiz 1

Week 5

Structure and function of ecosystemsEcosystems and the Physical Environment

Text: Chap 4

Lab: Living and physical worlds

Class discussion: Agriculture and the use of chemical fertilizers.

Should society use legislation to prohibit farmers using chemical fertilizers? Is

there an alternative to chemical fertilizers?

Feb 13- READING BREAK

Week 6

Feb 20- Structure and function of ecosystems

Week 7 Ecosystems and Living Organisms.

Text: Chap 5

Lab: Living and physical worlds

Class discussion: The nature of community.

Is community based mostly on competition or cooperation between

members?

Feb 27- Ecosystems of the World

Week 8 Text: Chap 6

Class discussion: Protecting BC's temperate rainforest ecosystem

Should cutting of BC's old growth temperate rainforest be stopped immediately?

Lab: Examining ecosystems: Examining Canada's ecosystems using GIS

March 6- **Human population**

Week 9 Text: Chap 8

Class discussion: Overpopulation

The current human population crisis causes or exacerbates all environmental problems, including energy issues and climate change: What is the solution?

Lab: Human population dynamics

Week 10

Research paper: Getting started

THEME: UNDERSTANDING ENVIRONMENTAL CHANGE

March 20- Wildlife and biodiversity

Week 11 Text: Chap 16

Lab: Valuing wildlife

Class discussion: Arctic National Wildlife Refuge

Should the Arctic National Wildlife Refuge be protected or developed as part of

North America's oil and gas reserves?

Video: Oil on ice

March 27- Food

Week 12 Text: Chap 18

Discussion: Agriculture

Should all food be produced organically?

Lab: Calculating your Ecological Footprint

April 3- Climate change Week 13 Text: Chap 20

Class discussion

Canada and climate change:

What are we doing? Should we do more? What should we be doing?

Given historic emissions does Canada have the same or more responsibility than

nations such as China and India?

Lab: Podcast Climate change

April 10-

Week 14

In class lab: Reflecting on the Future

Research paper due

5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

Tests - 20%
Lab work - 45%
Discussion questions - 10%
Research paper - 25%

Quiz 3

6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

Standard Grading System (GPA)

| Percentage | Grade | Description | Grade Point Equivalency |
|------------|-------|---|----------------------------|
| 90-100 | A+ | | 9 |
| 85-89 | Α | | 8 |
| 80-84 | A- | | 7 |
| 77-79 | B+ | | 6 |
| 73-76 | В | | 5 |
| 70-72 | B- | | 4 |
| 65-69 | C+ | | 3 |
| 60-64 | С | | 2 |
| 50-59 | D | Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a | 1 |

| | | prerequisite. | |
|------|---|--------------------------------------|---|
| 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 E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

| Temporary Grade | Description |
|--------------------|---|
| I | Incomplete: 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 | In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.) |
| cw | Compulsory Withdrawal: 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. |

7. 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.

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 the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED