



CAMOSUN COLLEGE
School of Arts & Science
Department of Social Sciences

GEOG-100-002
Environment and Sustainability
Winter 2020

COURSE OUTLINE

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

Ω Please note: This outline will *not* be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

| | |
|------------------|---|
| (a) Instructor | Tim Elkin |
| (b) Office hours | Mon 10.30-11.20; 1.30-2.20. Wed 10.30-11.20 |
| (c) Location | E238 |
| (d) Phone | 370-3115 Alternative: _____ |
| (e) E-mail | elkint@camosun.ca |
| (f) Website | _____ |

2. Intended Learning Outcomes

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

1. 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 et al., 2015, *Environment* (9th edition), Toronto: Harcourt [although the earlier edition text (8th, 2012) is acceptable; there will be some differences, identified in D2L Content].

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

Topic Outline

INTRODUCTION

Week starting

Jan 6- **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 13-
Week 2 **Introducing environmental science and sustainability**
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.
Is oil sands development in Alberta an acceptable risk?
Video: H2Oil

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

Jan 20-
Week 3 **Addressing environmental problems: Policy, economics and 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 27-
Week 4 **Ecosystems and Energy**
Text: Chap 3

Lab: Ecosystems and Energy

Class discussion: Whaling.
Is whaling an unacceptable practice that should be stopped immediately?
Video: Whale Mission

Feb 3-
Week 5 Quiz 1

Structure and function of ecosystems
Ecosystems 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 10-
Week 6 **Structure and function of ecosystems**
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 17-
Week 7 READING BREAK

Feb 24- **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 2-
Week 9 **Human population**
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

March 9-
Week 10 Quiz 2

Research paper: Getting started

THEME: UNDERSTANDING ENVIRONMENTAL CHANGE

March 16-
Week 11 **Wildlife and biodiversity**
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 23-
Week 12 **Food**
Text: Chap 18

Class discussion: Agriculture
Should all food be produced organically?

Lab: Calculating your Ecological Footprint

March 30-
Week 13

Climate change
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 6-
Week 14

Quiz 3

In class lab: Reflecting on the Future
Research paper due

5. Basis of Student Assessment (Weighting)

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

6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

7. Recommended Materials to Assist Students to Succeed Throughout the Course

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

1. 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 |

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

| Grade | Description |
|-------|---|
| COM | The student has met the goals, criteria, or competencies established for this course, practicum or field placement. |
| DST | The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement. |
| NC | The student has not met the goals, criteria or competencies established for this course, practicum or field placement. |

B. 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 <http://camosun.ca/about/policies/index.html> for 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. |