CAMOSUN COLLEGE	**School of Arts & Science** **SOCIAL SCIENCES DEPARTMENT** **GEOG 100** **Environment and Sustainability** **W/2015**

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:	Mon 10.30-12.30; Tues 11.30-12.30; Wed 10.30-11.30		
(c)	Location:	E238		
(d)	Phone:	370-3115	Alternative Phone:	
(e)	Email:	elkin@camosun.ca		
(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:

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

Raven, Berg and Hassenzahl, 2012, Environment (8th edition), Toronto: Harcourt

Course manual

4. Course Content and Schedule

INTRODUCTION

Week starting

Jan 5- Week1 — Introduction to the course: course outline
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?

UNDERSTANDING THE HUMAN RELATIONSHIP WITH THE ENVIRONMENT

Jan 12- Week 2 — Introducing environmental science and sustainability
Ecological Footprints
Text: Chap 1

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

Class discussion 1: Recognizing ecological limits
Should Canadians recognize ecological limits and reduce their ecological footprint?
Required reading:
Global Footprint Network, *Living Planet Report 2008, p.2-3* (See Course manual)

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

Required reading (discussion):
Kenneth Rogoff, *Technology, complexity, economy, catastrophe*.
Globe and Mail Jun 02, 2010 (See Course Manual)

Jan 19- Addressing environmental problems: Policy, economics and worldviews
Week 3 Text: Chap 2

Lab: Addressing environmental problems: Policy and economics; worldviews.
Video: Subdue the Earth

Class discussion: Addressing environmental problems
How 'green' is our campus? What environmental problems exist on the Camosun campus? What solutions can you identify to these problems?

UNDERSTANDING THE ENVIRONMENT

Jan 26- 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?

Feb 2- Structure and function of ecosystems
Week 5 Ecosystems and the Physical Environment; Ecosystems and Living Organisms. Text: Chap 4, 5

Lab: Living and physical worlds

Required reading (lab):
Leakey, R., The Sixth Extinction. Ch. 8: *Value in Diversity*. Toronto: Doubleday (see Course manual)

Class discussion 1: The nature of community.
Is community based mostly on competition or cooperation between members?
Consider concepts that support your answer.

Class discussion 2: 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 9- **FAMILY DAY**
Week 6 **&**
READING BREAK

Quiz

Feb 16- Ecosystems of the World
Week 7 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

Feb 23- 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

Video: Hans Rosling, *No more boring data*

March 2-Ecosystems of the World
Week 9

Lab: Climate change and BC's forest ecosystems

Podcast: He Sees Our Hot Future

Quiz

UNDERSTANDING ENVIRONMENTAL CHANGE

March 9-Wildlife and biodiversity
Week 10 Text: Chap 16

Lab: Valuing wildlife

Required reading (lab):
Leslie Anthony, *Fitness for Survival*, Globe and Mail, Nov 23, 2013 (see Course manual)

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 16 Wildlife and biodiversity
Week 11 **Lab:** Ecosystems and biodiversity: Issue of exotic species
Podcast: Bioinvasion: Attack of the Alien Species!

Research paper: Getting started

March 23- Food
Week 12 Text: Chap 18

Lab: Calculating your Ecological Footprint
Required reading (lab):
Wackernagel, Mathis, How Big is Our Ecological Footprint? (See Course Manual)

Video: Ecological Footprint

Online discussion: Agriculture
Should all food be produced organically?
Based on three short CBC podcasts:
Want to save the planet: Skip the farmer's market; Case for small, local and organic farming; Organic versus non-organic

March 30- Climate change
Week 13 Text: Chap 20

Lab: Climate change
Podcast: This Changes Everything: Capitalism versus the Climate

April 6- Week 14 Quiz

In class lab: Reflecting on the Future
Research paper due in class

5. Basis of Student Assessment (Weighting)

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

Quizzes	- 10%
Lab work	- 50%
Discussion questions	- 15%
Research paper	- 25%

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	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	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	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 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 3rd 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