



School of Arts & Science
SOCIAL SCIENCES DEPARTMENT
GEOG 100-004
Ecosystems and Human Activity
Semester 2006F

COURSE OUTLINE

The Approved Course Description is available on the web @ www.elkin.disted.camosun.bc.ca

1. Instructor Information

(a)	Instructor:	Tim Elkin		
(b)	Office Hours:	Mon 10.30-12.30am; Tues-Thurs 10.30-1130am		
(c)	Location:	E238		
(d)	Phone:	370-3115	Alternative Phone:	
(e)	Email:	elkint@camosun.bc.ca		
(f)	Website:	www.elkin.disted.camosun.bc.ca		

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

(a)	Text	Raven and Berg, 2006, <u>Environment</u> (5 th edition), Toronto: Harcourt
(b)	Other	Lab manual 2006F

4. Course Content and Schedule

Theme 1: Humans in the Environment	
Sept 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. <i>What are the most important environmental problems facing us today?</i>

Sept 11- Introducing environmental science and sustainability
Week 2 Text: Chap 1

Lab

Environmental science:

Research and the scientific method; geography of environment; human impact on the environment

Class discussion: Scientific assessment, risk analysis and the precautionary principle.

What chemicals pose a risk to the environment? What chemicals pose a risk to human health? Should there be greater controls on the use of chemicals in society? Are genetically modified foods a risk to society?

Sept 18- Addressing environmental problems: Policy, economics and
worldviews
Week 3 Text: Chap 2

Lab

Addressing environmental problems:
Policy and economics; worldviews.

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?

Video: Subdue the Earth

Theme 2: The World We Live In

Sept 25- 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?

Context: The hunting of whales (whaling) has a long history. Traditional hunts by small groups of primarily indigenous peoples have been replaced by high tech factory-style whaling. Until the modern era, whale populations were rarely at the point of extermination. Now, populations of most of the large species and many of the smaller species are at critical levels. Should whaling in international waters be allowed to continue? Should whaling be limited to closely monitored hunts by indigenous people? What kind of whale products should be traded internationally?

Place yourself in the position of an owner of a Japanese factory whaler working in the Great Southern Ocean and in the position of someone who opposes whaling.

For additional information, see 'Take a Stand' in Raven text, end of chapter 3.

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

Lab
Structure and function of ecosystems

Class discussion: The nature of community.
Is community based mostly on competition or cooperation between members?
Consider the concepts in the chapter that are supportive of your answer.

Class discussion: Agriculture and the use of chemical fertilizers.
***Should society use legislation to prohibit farmers using
fertilizers?
Is there an alternative to chemical fertilizers?***

Oct 9-
Week 6 TEST I

Ecosystems of the World
Text: Chap 6

Lab
Structure and function of ecosystems (continued)

Class discussion: BC's coastal temperate rainforest.
*Should logging of BC's old growth temperate rainforest be stopped
immediately?*

Oct 16-
Week 7 Studying an ecosystem in the field: Rithet's Bog

Theme 3: Human Population and the Environment

Oct 23 -
Week 8 Human population dynamics
Text: Chap 7, 8

Lab
Population dynamics

Class discussion: Addressing the tragedy of the commons: Closing
the commons and examining the viability of the voluntary approach.
The case of population controls
Should strict population controls be used by all nations to address social and environmental
problems?

Required reading: Jared Diamond, 2005, Collapse, Ch. 10: *Malthus
in Africa: Rwanda's Genocide* (pp. 311-328). Penguin Books

Video: The population bomb

Theme 4: Resource and Environmental Management

Oct 30-
Week 9 Water
 Text: Chap 14

Water resources

Class discussion: Dam construction in BC.
Should all future dam construction be prohibited in BC?

Context. Dams can provide clean energy, water storage, and flood control. Hydro electricity forms an important part of the BC economy. However, dams also can cause environmental degradation and can prevent fish from migrating and breeding. In the Pacific Northwest, salmon populations have declined greatly.

For additional information, see 'Take a Stand' in Raven text, end of chapter 14.

Video: Cadillac desert

Nov 6-
Week 10 TEST II

Research paper
Students work on research paper.

Nov 13-
Week 11 Wildlife and Biodiversity
 Text: Chap 17

Lab

Biodiversity

Required reading: Leakey, R., 1995, *Value in Diversity*, The Sixth Extinction Ch. 8. Toronto: Doubleday

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?

Context. The fate of the Arctic National Wildlife Refuge relates to decisions the US makes about energy policy, transportation choices, and other seemingly unrelated matters. Caught in the balance are the culture and livelihood of the Gwich'in people and the migratory wildlife in this fragile ecosystem.

For additional information, see 'Take a Stand' in Raven text, end of chapter 17, and the website for a recent documentary video,

<http://www.oilonice.org>.

Video: oil on ice

Nov 20-
Week 12 Food
 Text: Chap 19

Lab

Calculating your Ecological Footprint

Required reading: Wackernagel, M., How Big is Our Ecological Footprint?

Margaret Wentz, 2006, *Puh-leez: It's food artisan, not farmer.* Globe and Mail.

Class discussion: Organic farming and vegetarianism
Is organic food a fad, or an important environmental issue? Should Canadians be required to follow a vegetarian diet?

Nov 27-
Week 13 Atmospheric change
Text: Chap 21

Research paper due Nov 28

Lab
Climate change

Class discussion: Canada's position on the Kyoto Protocol.
Should Canada continue its commitment to the Kyoto Agreement, given that the US and Australia have declined to ratify the Agreement and developing nations such as China and India are not subject to the Agreement?

Required reading

Lawrence Solomon, *Just don't do it: The Harper government can easily achieve a Kyoto alternative.* Terence Corcoran, *Kyoto's dead: What's next?* Financial Post, May 31 2006

Theme 5: Tomorrow's world: Thinking of the Future

Dec 4- TEST III
Week 14

Thinking of the Future; reflecting on worldviews

Video: The man who planted trees

5. Basis of Student Assessment (Weighting)

(a)	Labs	35%
(b)	Quizzes	35%
(c)	Paper	20%
(d)	Discussion	10%

6. Grading System

(No changes are to be made to this section, unless the Approved Course Description has been forwarded through EDCO for approval.)

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
95-100	A+		9
90-94	A		8
85-89	A-		7
80-84	B+		6
75-79	B		5
70-74	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 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 for information on conversion to final grades, and for additional information on student record and transcript notations.

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 on the College web site in the Policy Section.