CAMOSUN COLLEGE	**School of Arts & Science** **SOCIAL SCIENCES DEPARTMENT** **GEOG 220** **Natural Resource Systems** **Quarter or Semester/Year**

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 3.30-4.20; Wed 10.30-11.20; Thurs 3.30-4.20; Fri 10.30-11.20		
(c)	Location:	E238		
(d)	Phone:	250-370-3115	Alternative Phone:	
(e)	Email:	elkint@camosun.bc.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. Describe and explain the major concepts underlying the management of natural resources.
2. Apply these management concepts to the management of specific natural resource systems.
3. Identify and discuss significant contemporary factors that influence the management of natural resources.

3. Required Materials

Roberts J., 2011, Environmental Policy Routledge

Gore C. and P. Stoett, 2009 (eds.), Environmental Challenges and Opportunities (Toronto: Emond Montgomery)

There is a Course Manual for sale in the college bookstore. The manual contains readings from the following works: Mitchell B., 2010, (ed.) Resource and Environmental Management in Canada (Toronto: Oxford); Mulrennan M., 1998, A Casebook of Environmental Issues in Canada (Wiley).

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.)

Week starting
Week 1 Sept. 5-
Introduction to the course
Course overview
Reading
Stoett Peter and Christopher Gore, *Introducing the Global-Local Dimension* in Gore C. and P. Stoett, 2009 (eds.) Environmental Challenges and Opportunities

Mitchell B., Policy and Practice – Issues, Challenges and Opportunities in Mitchell B., 2010, (ed.) Resource and Environmental Management in Canada (Toronto: Oxford) Ch. 1, pp. 1-18

THEME: JURISDICTION OF NATURAL RESOURCES IN CANADA

Week 2 Sept. 12-
CLASS 1: LECTURE

Jurisdiction of natural resources
International and national jurisdiction; Constitution Act; federal and provincial jurisdiction; Indigenous rights

CLASS 2: Case Study
Case study: Federal versus provincial control of resources
Reading
Paehlke, Robert, Global politics comes to Fort McMurray: Energy and climate change. Ch. 11 in Gore C. and P. Stoett, 2009 (eds.) Environmental Challenges and Opportunities

Video: Canada for Sale
THEME: UNDERSTANDING CONCEPTS

Week 3 Sept. 19-
CLASS 1: LECTURE
Defining natural resources: Environmental capital and environmental services; recognizing complexity and uncertainty; sustainability; resource depletion
Reading
Roberts, Ch. 1: *So what's the problem?*

Commission on Resources and Environment, *Tatshenshini-Alsek Land Use* (in course manual)

National RoundTable on Environment and Economy, Boreal Futures, Ch. 2 *Canada's Boreal Today* pp.8-15 (in course manual)

CLASS 2: Case Study
Case study: Examining resource depletion: The case of biodiversity
Reading
Bocking Stephen, Making Space for Species: local and Global Challenges of Biodiversity. Ch. 2 in Gore C. and P. Stoett, 2009 (eds.) Environmental Challenges and Opportunities

Week 4 Sept 26
CLASS 1: LECTURE
Understanding the causes of overuse of natural resources: Worldviews: role of values in determining attitudes and behaviour; resource ownership; Hardin's tragedy of the commons; examining resource scarcity and depletion
Reading
Roberts, Ch. 2: *The roots of environmental problems*.

Mary Page Webster, The Windy Craggy Experience**, Fraser Institute** (in course manual)

In-class exercise: Profiling natural resources in BC economy (in course manual)

CLASS 2: Case Study
Case study: Sealing and fisheries: Conflict of Worldviews
Reading: Mulrennan, Monica, 1998, *Atlantic Sealing: Immoral slaughter or sustainable harvest?* (in course manual)

Video: Sealing Fate

Week 5 Oct 3
CLASS 1: LECTURE
Examining goals for resource management: Addressing resource scarcity (Malthus; limits to growth study) and the emergence of the concept of sustainable development; ecosystem approach; assessing sustainability
Reading
Roberts, Ch. 3. *Sustainable development and the goals of environmental policy*

CLASS 2: Case Study
Case Study: Sustainability, economics and salmon aquaculture in BC
Reading
Volpe John and Karena Shaw, Fish Farms and Neo-liberalism: Salmon Aquaculture in BC. Ch. 6 in Gore C. and P. Stoett, 2009 (eds.) Environmental Challenges and Opportunities

Week 6 Oct 10
CLASS 1:
Test

CLASS 2: Discussion

ONLINE DISCUSSION: Students choose one of several topics (see D2L)

THEME: INTERNATIONAL CONTEXT AND RESOURCE MANAGEMENT

Week 7 Oct 17
CLASS 1: LECTURE
International environmental policy making
Reading
Roberts, Ch. 7 *International environmental policy making*

CLASS 2: Case study
Case study: International policy, the Arctic and polar bear protection
Reading
Boardman, Robert, Polar Bears and the Canadian Arctic: local Communities in a Globalizing World. Ch. 12 in Gore C. and P. Stoett, 2009 (eds.) Environmental Challenges and Opportunities

THEME: ROLE OF SCIENCE AND ECONOMICS IN RESOURCE MANAGEMENT

Week 8 Oct 24
CLASS 1: LECTURE
Science, Technology and Policy
Science and policy making; uncertainty, precautionary principle and adaptive environmental management
Reading
Roberts, Ch. 4. Science and Technology: Policies and Paradoxes

CLASS 2: Case Study
Case study: Exploring the precautionary principle, the case of GM food
Reading
Mulligan, Shane, Canada and the Gene Revolution in Agricultural Biotechnology.Ch 3 in Gore C. and P. Stoett, 2009 (eds.) Environmental Challenges and Opportunities

Week 9 Oct 31
CLASS 1: PROJECT (In GP lab)
Examining feasibility of renewable energy
Reading
Etcheverry J., Local and Global Energy Needs: Toward a Renewable Future. Ch 10 in Gore C. and P. Stoett, 2009 (eds.) Environmental Challenges and Opportunities

CLASS 2: Case Study
Case study: Examining Quebec's Great Whale Project
Reading
Mulrennan, Monica, 1998, *Great Whale: Lessons from a Power Struggle* (in course manual)
Video: Riding the Great Whale (NFB)

Week 10 Nov 7
CLASS 1: Discussion
ONLINE DISCUSSION: Students choose one of several topics (see D2L)

CLASS 2
Remembrance Day

Week 11 Nov 14
CLASS 1: LECTURE
Economics and resource management
Reading
Roberts, Ch. 8. *Environmental economics*

CLASS 2: PROJECT (In GP lab)
Addressing climate change at the local level: Land use and transportation choice

Week 12 Nov 21
CLASS 1: LECTURE
RESEARCH PAPER

THEME: DECISION MAKING IN RESOURCE MANAGEMENT

CLASS 2

Natural resources and decision making
Decision making process; environmental assessment

Week 13 Nov 28
CLASS 1
Examining the Tatshenshini-Alsek wilderness preservation decision
Part 1: Examining resource interests
Reading
Interim Report on Tatshenshini-Alsek Land Use, British Columbia: Volume 2: Appendices British Columbia. Commission on Resources and Environment, 1993 (in course manual)
Part 2: Making the decision
Reading
BC Hydro, *Making Decisions*

T. L. McDaniels, *An analysis of the Tatshenshini-Alsek wilderness preservation decision*, Journal of Environmental Management (1999) 57, 123–141 (pp.123-132 extracted in course manual)

RESEARCH PAPER DUE IN CLASS

CLASS 2
Energy Policy in BC: Making a decision on the Site C Project
Part 1: Examining resource interests
Reading
BC government, 2007, The BC Energy Plan (in course manual)

Rex Weyler, 2010, *What's wrong with the BC Energy Plan?* BC Citizens for Public Power (in course manual)

Shaffer, Marvin, *Clean Energy Act will cost British Columbians*. Globe and Mail
June 14 2010 (in course manual)

Week 14 Dec 5
CLASS 1
Energy Policy in BC: Making a decision on the Site C Project
Part 2: Making the decision
Reading
BC Hydro, 2009, Peace River Site C Hydro Project: Stage 2 Summary Report (in course manual)

Northeast News 2009 *Karl Mattson's Film a Rallying Cry against Site C* (in course manual)
Video: Keeping the Peace

CLASS 2
Test

5. Basis of Student Assessment (Weighting)
(This section should be directly linked to the Intended Learning Outcomes.)

CASE STUDIES
These exercises are based on examination of concepts and issues associated with resource management case studies. Case studies are ideal for providing opportunities to see the relationship between theory and practice, to recognize how knowledge of concepts from course curriculum helps to provide understanding of practice of resource management. **This work is not realistic unless students have read the set readings beforehand.**

7 case studies are examined: 5 cases from the course text, **Gore C. and P. Stoett, 2009 (eds.), Environmental Challenges and Opportunities and 2** cases from Mulrennan, A Casebook of Environmental Issues in Canada.

Work on these case studies has both an in-class and online component.

Students are allocated a group at the beginning of the semester. Case studies are first discussed face-to-face in-class. Each group will have an alternating chair, who will direct the group's discussion. This is a structured discussion in which the students address structured questions and are introduced to concepts relevant to the case study. At the end of class, for each case study, the chair hands in a report, with a summary of findings. Participation marks are allocated for being part of this exercise.

The online component involves the use of a **wiki**. Students work in their group using a **wiki** to develop a comprehensive definition of each concept associated with each of the 8 case studies. The concepts for

each case study are listed on the wiki. Students must both define the concept and explain its relevance to practice in the specific case study. The work will be completed using **Wikispaces** (http://geog220-**x**.wikispaces.com). The x refers to the number of your group. For example, Group 1 will work on http://geog220-1.wikispaces.com. The purpose here is to provide students the opportunity to work cooperatively online, in a small group, to define concepts. Think *Wikipedia* as the process for creating the concept definitions**.** Definitions must be completed 2 weeks from the date case study is introduced. All case studies are introduced in CLASS 2 (on Fridays). Definitions must be completed 2 weeks later by Sunday midnight. All students in a group must be involved in creating (through authoring and/or online editing) all of the final definitions. You will note that some concepts are repeated in several cases. In this situation, a previous definition of the concept is repeated, and the focus of the work is on its application to practice in the case study.

ONLINE DISCUSSION
Discussion exercises are designed for discussion of **values** that relate to course curriculum, to explore differences in the way natural resources are valued. Students engage in three topic discussions (from a choice of six), using D2L's discussion board. The procedure and dates are as follows:
For each online discussion, students choose one topic from the choices available. The topics are phrased in the form of a thesis statement. Consider both sides of the thesis, for and against. **By one week from the date of discussion** post a short essay (250 words) on the D2L discussion board, which describes your own view (position). The essay should address your values that lead you to your position; ask yourself the question, what is that I value that leads me to my position. **Essays not posted on time will not receive marks. After the in-class discussion you have two weeks to read three other students' essays and post a response to their point of view.** Use 100 words a guide for your response. The response postings are for peer review only. I will not be grading them but checking to ensure completion, following the guidelines above. Students not posting a substantive contribution will not receive marks.

PROJECTS
There are two projects relating to problems in resource and environmental management. Each is explained in the course manual. Both projects require the use of software, and are introduced in the GP lab.
Projects are listed below:
Project 1: Examining feasibility of renewable energy (introduced Week 9 Oct 31)
Project 2: Addressing climate change at the local level: transport cost analysis relating to transportation choice (introduced Week 12 Nov 21)

A short report is expected for each project, based on set questions. Students have the option to work in pairs for both projects, with one report. Digital copies of the project questions are available online http://online.camosun.bc.ca. **Project reports are due two weeks from start date of the project.**

RESEARCH PAPER
Students will write a paper on one of the discussion topics. Approach your topic by formulating a thesis based on the underlying research question, then carry out research to support your thesis. The paper will have the usual academic structure of introduction, discussion and conclusion.
This is an opportunity to draw on course concepts; demonstrate your understanding by identifying and discussing relevant course concepts in your paper.
You must include discussion of works that support your arguments (a minimum of six in total). A minimum of three works must be peer-reviewed. All works must be cited in an approved bibliographic style.
Use 1500 words as a guide for the length of your paper. **Research paper is due first class of week 13 (Nov 30).**

Grading for the paper is based on the following:
- Research (20%) - show that you used outside sources, at least five are expected and the use of peer-reviewed sources is strongly encouraged (minimum three)
- Substance (20%) - show that you understand the material; explain it accurately and clearly
- Quality of thought and analysis (40%) - show that you can think intelligently and critically about the material; **identify and discuss course concepts**; present some of your own ideas
- Style (20%) - write your paper in standard academic English, double-spaced, with proper grammar, syntax and punctuation; reference all sources in an approved citation style

TESTS
The format of tests will be discussed in class.

Summary

Wiki	= 15%
Online discussion	= 8%
Paper	= 25%
Tests	= 30%
Projects	= 12%
Participation	= 10%

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