CAMOSUN COLLEGE	***School of Arts & Science*** ***SOCIAL SCIENCES DEPARTMENT*** **GEOG 100-001** **Environment and Sustainability** **Fall 2015**

COURSE OUTLINE

1. Course Description

This course provides a geographic perspective on human interactions with the environment. It places people within their environmental system, examines means and impacts of natural resource extraction, and considers ways we might be able to better co-exist with the natural world. Topics include basic environmental science and ethics, energy and water resources, wildlife and protected areas, forestry, mining, fisheries and agriculture, waste management and climate change. An emphasis on current events will be maintained. This course is intended for both science and non-science majors.

My main hope is that this course will improve your ability to develop informed, critical and scientifically sound opinions about environmental issues. Hopefully you will also be inspired to study more geography!

My classes tend to be quite informal, and I encourage participation and discussion. My goal is to have you think and understand, so please speak up if you are confused! Group work is encouraged, and you should help each other learn. But this does not mean you can copy! Each student must do their own individual assignments, and if I catch people copying, all parties involved will get a mark of zero.

Note: The official Approved Course Description is available on the web at http://camosun.ca/learn/calendar/current/web/geog.html

- *Please note: this outline will be electronically stored for five (5) years only. It is strongly recommended students keep this outline for your records.*

2. Instructor Information

Instructor:	Chris Ayles
Office Hours:	Mon 4:30 – 5:20; Wed, Thu 12:30 – 1:20. Other times available by chance or appointment.
Location:	Fisher 342C
Phone:	370-3393
Email:	cayles@camosun.bc.ca
Website:	faculty.camosun.ca/chrisayles

3. 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.

4. Course Materials

(a)	Text	Optional: Dearden, P. and B. Mitchell, 2012. *Environmental Change & Challenge, 4th Edition*. Don Mills, ON: Oxford University Press, 606 pp. • Recommended readings will be drawn from this book and other sources (see below.) • This text is available in the book store, and there also will be a reserve copy in the library. • Older editions or similar environmental science textbooks may be acceptable substitutes.

5. Course Content

- **Lectures:** This class has two two-hour blocks on Mondays (in Young 217) and Wednesdays (in Fisher 206). Attendance is essential. I will post basic lecture outlines on my web site: faculty.camosun.ca/chrisayles. These outlines are no substitute for coming to class! You will need to complete them by taking notes during class, and keeping up with textbook reading assignments. If we watch a video in class, you should take notes – this is testable material.

- **Readings** are an important part of this and any course – they provide depth, context and a different take on the topic Suggested readings are detailed below; these may be modified as the term goes on. I don't usually ask picky test questions based on readings, but I guarantee that students who read will understand the material better and get better grades. So please try to keep up with the assigned reading, or something similar, as the term goes along. You won't regret it.

- **Labs:** There are eight labs designed to explore select topics in further depth, and to introduce environmental science skills such as map reading, calculations, research and writing. Download the labs from the course web site, and try to read them before class. Time to work on labs will be provided on Wednesdays, though you will often need to do some work before or after the allotted time. Attendance of labs is very important. No credit will be given for wrong answers or missed activities due to unexcused absence from lab. Bring a pencil, eraser, calculator, ruler, and spare paper. You may work with others, but each student must write their own individual answers unless instructed otherwise. Hard copies of answers (either on the handout or your own paper) are generally due a week after the lab period. Late assignments are subject to a 10% per day penalty, and will not be accepted after I have returned them marked.

- **Presentation:** Working in pairs, each student will be responsible for researching and presenting an environmental topic of their choice, to be presented in class during a poster session. Details will be outlined in a separate handout.

- **Exams:** There will be a midterm and a final exam. The format for these will be a combination of multiple choice, short answer and long answer questions. They mainly will emphasize the lecture material, though readings and lab material will also be drawn upon. The final exam will be cumulative.

- **Illness, etc.:** If you miss a lab or exam due to illness or some other serious reason, I must ask you to provide a doctor's note or other documentation to support your story. Otherwise, a mark of zero for the missed assignment will be given. Exams and field trips are hard to reschedule, so try not to miss them unless you are too sick to perform at a normal level.

  Students who miss an exam for a valid reason must contact me within 24 hours with an explanation. In such cases, one makeup exam time will be scheduled, and all students needing it will be expected to attend.

6. Basis of Student Assessment

Evaluation will be based on accuracy, thoroughness, and neatness. When I grade your work, I am looking for proof of your understanding, so do everything clearly and carefully – that way you may get partial credit, even for wrong answers. As a general rule, always show your work and keep track of units of measure! I endeavour to mark things fairly and consistently, but if you have a question about my assessment, feel free to ask about it.

(a)	Labs	36% (4.5% each)
(b)	Presentation	14%
(c)	Midterm exam	20%
(d)	Final exam	30%

7. Course Schedule (Subject to change at instructor's discretion):

Week	Monday (lecture)	Wednesday (lab)
7-Sep	No Class - Labour Day	Course Intro
14-Sep	Earth Systems	Lab 1: Maps
21-Sep	Ecosystems	Lab 2: Rithet's Bog ecology **(Field trip – logistics TBA)**
28-Sep	Population and Worldviews	Lab 3: Ecological footprint **(Meet in Ewing 200)**
5-Oct	Energy	Lab 4:Energy forum
12-Oct	No Class - Thanksgiving	Climate Change (lecture)
19-Oct	Food Systems (and **FEDERAL ELECTION!**)	**Midterm Exam**
26-Oct	Forestry	Lab 5: BC Forests
2-Nov	Water	Lab 6: Water resources
9-Nov	Water resources guest lecture	No Class - Remembrance Day
16-Nov	Mining	Lab 7: Landscape change **(Meet in Ewing 200)**
23-Nov	Urban Issues	Lab 8: Waste management
30-Nov	Protected Areas	Presentations
7-Dec	Presentations	Looking Forward / Exam Review

Exam Week **Final Exam**

8. STRONGLY SUGGESTED READINGS

Once again: you really ought to do these readings, or something equivalent. Better still, find additional material to read on your own! In fact, if you find something good, please email me and I will post it for the class.

Readings are from Dearden and Mitchell (4th Edition) unless otherwise noted. Readings from other sources will be available to download from the coure web site.

Week of:	*Reading / Comments*
Sep. 7	Chapter 1
Sep. 14	Atmosphere, hydrosphere and lithosphere sections of www.physicalgeography.net. This is way too much for a week! Browse, and read whatever interests or confuses you.
Sep. 21	Chapter 3 from Draper and Reed, 2009 (*Our Environment – A Canadian Perspective, 4th Edition*.)
Sep. 28	Taylor, D.M., 1992. Disagreeing on the basics – environmental debates reflect competing moral views. *Alternatives* 18(3), 26-33
Oct. 5	Chapter 13 from Miller, G.T. and S.E. Spoolman, 2010 (*Environmental Science, 13th Edition*.)
Oct. 12	Chapter 7
Oct. 19	Chapters 8 and 10 (And for an amazing extra read on this subject, check out *The Omnivore's Dilemma* by M. Pollan, 2006.)
Oct. 26	Chapter 9
Nov. 2	Chapter 11
Nov. 9	Asian Development Bank, 2013. Thinking About Water Differently – Managing the Water-Food-Energy Nexus. Manila, Philippines: Asian Development Bank, 35 pp. (Warning: this is a bit advanced and policy-oriented. Consider it optional.)
Nov. 16	Chapter 23 from Botkin, et al., 2006 (*Environmental Science – Earth as a Living Planet, Canadian Edition*.)
Nov. 23	Chapter 13
Nov. 30	Chapter 14
Dec. 7	Chapter 15

9. Grading System

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

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	*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 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	*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.

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.

10. 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.