

CAMOSUN COLLEGE  
GEOGRAPHY 100: ECOSYSTEMS AND HUMAN ACTIVITY  
Course Outline – Winter 2004

Instructor: Paul J. Miller

Classroom Instruction: Tuesdays & Thursdays - 11:30-13:20 in Fisher 336

Office Hours: Tuesday (10:00-11:00); Thursday (10:00-11:00) (*other times by request*)

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## **COURSE DESCRIPTION**

Two main themes of geographical enquiry are determining and explaining the biophysical processes that underlie areal differentiation of the earth's surface, and understanding the relationship between these processes and human activities. The first focus is often described as physical geography and includes biogeography, climatology, and geomorphology; resource management and regional geography cover the second focus.

The purpose of this course is to introduce both of these aspects of the discipline. In order to understand the dimensions of various environmental problems, such as acid rain, global warming, eutrophication, species extinction, deforestation and a host of others, you must have some idea how the biosphere functions. The first part of the course focuses on this aspect, involving understanding of the ways in which energy flows and materials cycle throughout the biosphere, and the structure and organization of ecological communities. From this base, you will more readily appreciate the ways in which naturally occurring processes are changed by human activities such as forestry, agriculture, fisheries and water management. Examples from throughout the world, but primarily from Canada will be used to illustrate these changes.

## **INTENDED LEARNING OUTCOMES**

At the conclusion of the course, the student should 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; and
3. Demonstrate knowledge of courses of action, which address environmental concerns.

## **REQUIRED MATERIALS**

Our Environment: A Canadian Perspective, 2<sup>nd</sup> Edition by Dianne Draper, ITP Nelson Publishing, 2002.

The course textbook is available at the Camosun College Bookstore, Lansdowne Campus. One copy will be placed on reserve in the library. Materials presented in class or required in support of lab exercises will be placed on reserve in the library throughout the term. Additional readings may be required.

## LEARNING OPPORTUNITIES

**Lectures**: There will be a minimum of two hours of lecture a week. The blackboard will be utilized and PowerPoint slide presentations will augment the traditional lecture style. When possible, I will diversify the lectures with videos, slides or guest lectures. I will also keep a folder with relevant readings and lab materials in the reserve section of the library.

**Labs**: There are seven labs in the course. Each lab contains exercises to familiarize students with the tools of geography and many of the issues faced by geographers. Attendance during lab periods is mandatory.

In the case of illness, the instructor must be contacted prior to the class time and an alternate arrangement must be made; otherwise, a mark of zero will be assigned. Always bring pencils, calculator, ruler and extra paper to lab, as some basic math and graphing will be required. In calculation-based labs, you must show all steps in your work in order to get full credit.

Most labs are due one week from the scheduled lab period. All labs are worth 4% each, except Lab 2, which is worth 10%, and Lab 6 is worth 5%. The instructor reserves the right to impose a 10% per day penalty on labs handed in late.

**Midterm Exam**: One midterm exam will be given during the term. See the attached schedule for the midterm date. The midterm will be a selection of short-answer, multiple-choice, and short essay-type questions.

**Final Exam**: There will be a three-hour final exam during exam week. This exam will be comprehensive, requiring students to demonstrate knowledge of the important concepts presented during the whole course, but the emphasis will be placed on material from the second half of the course.

**Presentations**: The material in this course is highly topical in a resource-dependent place like British Columbia. To emphasize this, 10 % of your mark is placed on a current-events related project. You are responsible for researching and designing a 7 to 8 minute presentation on a contemporary environmental issue of your choice.

Topics can include current environmental problems, people or groups making a positive contribution to the environment, or ways in which government decisions are affecting the environment. The topic may be local, regional, national or international. Students are encouraged to discuss their topic and presentation style with the instructor ahead of time.

## EVALUATION

|               |      |
|---------------|------|
| Midterm Exam  | 20 % |
| Lab Exercises | 35 % |
| Presentation  | 10 % |
| Final Exam    | 35 % |

## GRADING SYSTEM

The standard grading scale of the *Division of Arts and Science* will be used for this course.

|       |         |      |           |
|-------|---------|------|-----------|
| A+ =  | 95-100% | B- = | 70-74%    |
| A =   | 90-94%  | C+ = | 65-69%    |
| A - = | 85-89%  | C =  | 60-64%    |
| B+ =  | 80-84%  | D =  | 50-59%    |
| B =   | 75-79%  | F =  | Under 50% |

## LEARNING SUPPORT AND SERVICES FOR STUDENTS

Camosun College provides a variety of services for students to assist them throughout their learning. This information is available in the College Calendar, Registrar's Office, or the College web site at the following address: <http://www.camosun.bc.ca>.

## ACADEMIC CONDUCT POLICY

There is an Academic Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the Camosun College web site in the Policy Section at the following address: <http://www.camosun.bc.ca/policies/>.

**Section 4 meets on Tuesdays and Thursdays from 11:30-13:20 in Fisher 336**

| Week | Date   |         | Topic Covered (% of final mark)                        | Reading |
|------|--------|---------|--------------------------------------------------------|---------|
| 1    | 6 Jan  | Lecture | Introduction; Our Environment: Problems and Challenges | Ch. 1   |
|      | 8 Jan  | Lecture | Environmental Studies: Science, Worldviews, and Ethics | Ch. 2   |
| 2    | 13 Jan | Lecture | Topographic Maps                                       | Handout |
|      | 15 Jan | Lab     | <i>Exercise 1 – Topographic Maps (4%)</i>              |         |
| 3    | 20 Jan | Lecture | Earth's Life Support Systems, Part 1                   | Ch. 3   |
|      | 22 Jan | Lecture | Earth's Life Support Systems, Part 2                   | Ch. 3   |
| 4    | 27 Jan | Lab     | <i>Exercise 2 – Mystic Vale Ecosystem (10%)</i>        | Ch. 4   |
|      | 29 Jan | Lecture | Human Population Issues and the Environment            |         |
| 5    | 3 Feb  | Lab     | <i>Exercise 3 – Population (4%)</i>                    | Ch. 5   |
|      | 5 Feb  | Lecture | Our Changing Atmosphere                                |         |
| 6    | 10 Feb | Lab     | <i>Exercise 4 – Atmosphere (4%)</i>                    |         |
|      | 12 Feb |         | Reading Break                                          |         |
| 7    | 17 Feb | Lecture | Agroecosystems and Land Resources                      | Ch. 6   |
|      | 19 Feb | Lab     | <i>Exercise 5 – Ecological Footprint (4%)</i>          |         |
| 8    | 24 Feb | Lecture | Freshwater Resources                                   | Ch. 7   |
|      | 26 Feb |         | Midterm (20%)                                          |         |
| 9    | 2 Mar  | Lecture | Oceans and Fisheries                                   | Ch. 8   |
|      | 4 Mar  | Lab     | <i>Exercise 6 – Fisheries and Aquaculture (5%)</i>     |         |
| 10   | 9 Mar  | Lecture | ** Guest Lecture **                                    | Ch. 9   |
|      | 11 Mar | Lecture | Forests                                                |         |
| 11   | 16 Mar | Lecture | Mining                                                 | Ch. 10  |
|      | 18 Mar | Lecture | Energy Resources                                       | Ch. 11  |
| 12   | 23 Mar | Lab     | <i>Exercise 7 – Energy Resources (4%)</i>              |         |
|      | 25 Mar |         | Student Presentations                                  |         |
| 13   | 30 Mar |         | Student Presentations                                  |         |
|      | 1 Apr  |         | Student Presentations                                  |         |
| 14   | 6 Apr  |         | Student Presentations                                  |         |
|      | 8 Apr  | Lecture | Course Summary                                         |         |

**\* Lectures topics are subject to revision to accommodate guest speakers.**