



**School of Arts & Science
SOCIAL SCIENCES DEPARTMENT**

**GEOG 274-001
Biogeography
2014W**

COURSE OUTLINE

This course explores the nature and function of Earth's biosphere, with an emphasis on the spatial distribution of ecosystems. Major topics include ecological processes, soils, ecosystem description and classification, dispersal and evolutionary processes, historical biogeography, and Species at Risk. Lab activities will introduce methods for sampling and analyzing biogeographic data.

The Approved Course Description is available on the web @
<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.

1. Instructor Information

(a)	Instructor:	Kara Pitman
(b)	Office Hours:	Tues, Wed, Thurs 10:30-11:20 am
(c)	Location:	Fisher 340A
(d)	Phone:	(250) 370-3378
(e)	Email:	pitmank@camosun.bc.ca
(f)	Website:	http://online.camosun.ca/

2. Intended Learning Outcomes

At the end of the course students will be able to:

1. Use ecological and historical perspectives to describe the function and spatial patterns of Earth's biosphere.
2. Describe the influence of environmental controls such as water on the distribution of ecosystems.
3. Discuss human influence on the biosphere.
4. Collect and analyze biogeographical data in order to interpret the spatial distribution of organisms.

3. Required Materials

Required Textbook:

- Pojar, J., and MacKinnon, A. 2004. *Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia, and Alaska*. Lone Pine Publishing, Redmond, Oregon.

Recommended Textbook:

- MacDonald, G.M. 2003. *Biogeography: Space, Time and Life*. John Wiley & Sons.

Lab Materials: Lab materials will be available for download through the course website on D2L.

4. Course Content and Schedule

Course Schedule: Subject to change at instructor's discretion

Date	Week	Lab (Monday)	Lecture (Wednesday)
Jan 6, 8	1	Course Introduction and intro to biogeography	History of Biogeography and Ecological Review
Jan 13, 15	2	Lab 1: Plant ID	Environmental Controls
Jan 20, 22	3	Lab 2: Vegetation Assessment – In the field	Niches, Community, Diversity
Jan 27, 29	4	Lab 3: Field mapping – In the field	Biomes and Climate of British Columbia
Feb 3, 5	5	Lab 4: Biomes and BC Climate	Physiography and soils of British Columbia
Feb 10, 12	6	<i>College Closed – No class</i>	Review or Video
Feb 17, 19	7	Test I	Biogeoclimatic Ecosystem Classification
Feb 24, 26	8	Lab 5: Ecosystem map	Grassland and Interior Dry Forests
Mar 3, 5	9	Lab 6: Soils – In the field	Coastal Rainforests
Mar 10, 12	10	Lab 7: Plot – In the field	Mountain and Northern Forests
Mar 17, 19	11	Lab 8: Lab report	Evolution, Speciation, Extinction
Mar 24, 26	12	Presentations	Disturbance and Succession
Mar 31 – Apr 2	13	Lab 9: Disturbance	Paleobiogeography
Apr 7, 9	14	Review	Test II

Learning Opportunities:

Lectures: There will be two hours of lecture per week. Lectures will be held on Wednesdays from 12:30 - 2:30 pm: Fisher 338. The lecture period will include PowerPoint slides and lecture material.

Course Website:

Lecture notes will be available weekly from the course website on Desire2Learn (D2L). I rely on D2L for a great deal of communication throughout the course. You should be checking our course page daily to be sure you are not missing important announcements.

Labs:

Labs will be held on Mondays from 11:30 am - 2:30 pm: Fisher 338. Field trips, field work and lab exercises are mandatory components of the course. Field work and lab exercise will take place on campus as well as on field trips. Plenty of notice will be given in class so that students will have time to make arrangements for field days. You will need to bring pencil, eraser, ruler and a calculator for lab periods. There are nine marked labs in the course. Each lab contains exercises to familiarize students with different aspects of biogeography. All labs are due one week from the lab period, except where noted. Labs are due at the beginning of the lab period, no exceptions. The penalty for assignments handed in late is 10% for the first 24 hours and 10% for each day after. 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. Teamwork is encouraged in labs. However, do not copy from each other when handing in assignments. While you may brainstorm and work together, all assignments must be written in your own words. Any students involved in copying will be given a mark of zero for that assignment.

Project Transect:

For this assignment you will form into groups of 2-3 students. I will provide each group with the start and end coordinates of a 'transect' of approximately 50-70 km length from a particular region of British Columbia. Each group will research the geography and climate of their transect site, the biogeoclimatic zones and transitions it includes, and the abiotic and biotic factors governing the distribution of vegetation species. As a group, you will submit a typical 'consultants' report on what you discovered and give a presentation. Your report should be approximately 750 words, typed, double spaced, times 12pt font, with 1 inch margins, page numbers and your name/student number clearly on the first page. This assignment is emulating what an environmental consultant would have to research and produce if asked to summarize the biogeographical and climatic controls of a particular region.

Examinations:

There will be two exams and both will be held in class. Each exam is worth 20% of your final mark. The first exam will explore content presented up to and including February 5th. The second exam will include material from February 5th until April 2nd. The exams are not cumulative.

5. Basis of Student Assessment (Weighting)

Lab Exercises	40%
Project Transect	15%
Presentations	5%
Midterm Exam	20%
Final Exam	20%
Total	100%

6. 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	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	<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, 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. <i>(For these courses a final grade will be assigned to either the 3rd course attempt or at the point of course completion.)</i>
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.

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.