

Faculty of Social Sciences Department of Geography

GEOG 274: INTRODUCTION TO BIOGEOGRAPHY SPRING 2016

Instructor: Jill Harvey Office: DTB B214

Office Hours: Tuesday 1:30-2:20 pm, or by appointment

Email: jeharvey@uvic.ca

Class information: Tuesday 2:30-4:20 pm – DTB A102

COURSE DESCRIPTION

I have designed this course to explore the geographic patterns of plant and animal species through space and time. Have you ever wondered why sitka spruce generally grows in coastal environments? Or why Adelie penguin populations are in decline in the Antarctic Peninsula? Biogeographers are tasked to <u>describe</u> and <u>explain</u> such phenomena in the natural world.

In this course, we will examine the abiotic (non-living) and biotic (living) factors that control the contemporary patterns of species distributions at local and global scales. As biogeographers we recognize that the modern distribution of life reflects both present-day environmental conditions and the past history of the planet. Through case studies, we will consider how the past, at various timescales, has shaped current biogeographical patterns. We will also consider the role of biogeographical research in conservation and environmental management.

This course draws on the introductory concepts presented in Geography 101A and Geography 103. Applied learning in this course provides an excellent foundation for anyone interested in upper level biogeography courses and field courses in the Geography Department.

COURSE OBJECTIVES

My intent for this course is to influence how you view the distribution of plants and animals. Upon the successful completion of this course you will be able to:

- (1) identify and describe the factors underlying the distribution of species and communities;
- (2) explain how biogeographical patterns have been influenced by common biogeographical processes including: disturbance, succession, dispersal, invasion, evolution and extinction:
- (3) describe how human activities have affected biogeographical patterns;
- (4) discuss, with the help of case examples, the application of biogeography to conservation and environmental management.

LAB COMPONENT

This course has a lab component that supplements the theory and foundations presented in lecture. The data collection, analysis and reporting in the labs is designed to emulate what a consultant or junior scientist would do in biogeography-related employment. We hope you enjoy getting outside during your lab time and interacting with your geography peers! Group work is an important part of the lab component and I encourage everyone to contribute meaningfully and respectfully to their lab groups. All lab related materials will be posted on CourseSpaces during the term. Any questions regarding the lab component can be address to me (jeharvey@uvic.ca) or Phil Wakefield (philw@geog.uvic.ca).

COURSE SPACES

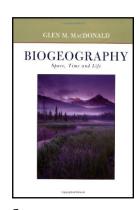
The course is supported by a CourseSpaces course management system (http://coursespaces.uvic.ca). I will provide outline notes for each lecture on CourseSpaces. I will also provide some practice test questions for the midterm exam. Additional required and supplemental readings will also be posted. These selected readings cover topics not in the text, and present interesting and engaging points of view. As a student in the course, I hope you will monitor this course on CourseSpaces to remain informed and up to date.

COURSE TEXTBOOK AND READINGS

The course has a *required* text that is an excellent resource. The text will parallel and supplement the lecture content. Please come prepared for each lecture and allocate approximately two to three hours per week for basic reading. The course text will be available on 2-hour reserve in the library.

Course text:

MacDonald, G.M., 2003. Biogeography: space, time and life. John Wiley & Sons, Inc.



Additional readings will also be assigned and will be posted on CourseSpaces.

SUMMARY OF ASSESSMENT

- 1. Laboratory assignments 35%
- 2. Midterm exam 20% **February 16th in class**
- 3. Final exam 30% Within April exam period
- 4. Term project* 15%
- * The term project is an opportunity for individual research on a species of your choosing (animal or plant). The species must have its current, native geographical range fall within BC. Your project will include an outline and a written five- to seven-page paper. Details for the term project will be posted on CourseSpaces and discussed in lecture in early January.

COURSE SCHEDULE

Date	Class topic*	Reading**			
Jan. 5 th	Course introduction and basic concepts	Chapters 1 and 2			
Jan. 12 th	Abiotic controls species' distributions	Chapter 3			
Jan. 19 th	Biological interactions	Chapter 4			
Jan 26 th	Disturbance and succession	Chapter 5			
Feb. 2 nd	Community concepts	Chapter 6			
Feb. 9 th	Reading week				
Feb. 16 th	Midterm exam				
Feb. 23 rd	Ecosystem classification	Meidinger and Pojar 1991			
Mar. 1st	Paleobiogeography	Chapter 7			
Mar. 8 th	Dispersal, colonization, invasion	Chapter 8			
Mar. 15 th	Evolution, speciation, extinction	Chapters 9, 10, 11			
Mar. 22 nd	Describing biogeographical distributions	Chapter 13			
Mar. 29 th	Biodiversity and conservation	Chapters 14 and 15			

^{*}Topic schedule is subject to change

**Chapters refer to the course text: Biogeography: space, time and life. Additional readings may be assigned.

UNDERGRADUATE GRADING

A+	A	A-	B+	В	B-	C+	С	D	F
90-100%	85-89%	80-84%	77-79%	73-76%	70-72%	65-69%	60-64%	50-59%	0-49%

COURSE POLICIES

Collegial respect: Together we will create a classroom environment that is conducive to learning. Please make sure to arrive on time and ensure your cell phones are switched off for class. In class and group discussions, ensure your comments are respectful.

Late assignments: Please inform me ahead of time if you feel you will miss a test for legitimate reasons (verifiable serious illness, injury or family circumstances) and we can arrange an alternate time. Similarly, if for a legitimate reason you are not able to submit an assignment on time, please notify me or your TA in advance to make alternative arrangements. Outside of this, we will accept assignments up to two days after the due date (with a 20% per day late penalty assessed).

Academic integrity: Please review http://web.uvic.ca/calendar2011/FACS/UnIn/UARe/PoAcI.html for the university policy on academic integrity and useful information on avoiding plagiarism. Plagiarism detection software will be used in this class.

Accessibility: Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability or health consideration that may require accommodations, please feel free to approach me and/or the *Resource Centre for Students with a Disability* as soon as possible. The Centre staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs, the faster we can assist you in achieving your learning goals in this course.

Attendance, participation and success: I encourage you to be an active participant and take part in classroom discussions, activities and contribute meaningfully in group-work assignments. Participation is an important academic component of this course, and combined with dedicated effort and a positive attitude, will hold you in good stead for the successful completion of this course!

Course Experience Survey (CES): I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.