

## **Principals of Biogeography, GEOG 3104**

Carleton University  
Department of Geography & Environmental Studies  
Fall 2017

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Office Hours: Monday (11:30am-12:30am) and (2pm-3pm)

### **INTRODUCTION**

The course introduces you to the study of **biogeography**, an important sub-discipline of Physical Geography and environmental studies. **Biogeography** is the study of the distribution and dynamics of organisms, their environments, and the influential processes. The objectives of the course are to give you an overview of biogeography, to introduce and illustrate major concepts, and to prepare you for more advanced courses in this subject. The topics in this course are important to students interested in the biophysical sciences and to students who wish to understand the processes underlying many human, social and economic aspects of our environment and natural resources.

### **COURSE FORMAT**

Lectures will follow the attached course outline. The lectures will introduce and illustrate the major concepts in biogeography. Support material will be available on the cuLearn course site.

### **SCHEDULE**

**Lectures:** Monday and Wednesday 4:35pm- 5:55pm in Tory Building 240

**Lab sessions:** - section A01: Friday 8:35am-10:25am in Loeb Building A410

- section A02: Thursday 11:35am-1:25am in Loeb Building A410

### **RECOMMENDED TEXTBOOK**

“MacDonald, G. M. 2003. Biogeography: Introduction to Space, Time and Life. John Wiley & Sons”.

### **STUDENT RESOURCES AND COMMUNICATION**

#### **Office Hours, Email and Appointments:**

If you have questions pertaining to lecture material I encourage you to come to my office hours or to meet me at the end of class to make an appointment.

All questions about missed assignments, missed exams, and other practical concerns about the course should be directed to me by email. Emails will be responded to during business hours only. Please place the course number GEOG 3104 in the subject line.

#### **cuLearn Course Site:**

The cuLearn course site of GEOG 3104 contains information on all aspects of the course. It includes partial outlines of lectures (not complete notes) and graphs or diagrams presented in class. You need to supplement these notes by attending the class lectures or by referring to the textbook. You will be able to access cuLearn course site and to download files on the first week of classes. If you are not able to login, please contact the course instructor.

## EVALUATION

Final marks in the course are based on your performance in five categories as follows:

Participation	5%
Midterm Exam	25%
Lab assignments/Exercises	20%
Term project	20%
Final Exam	30%

### Participation

Students are expected to attend classes and to discuss the materials for each topic. Your attendance, asking questions, participation in class discussions, and timely submission of assignments will count towards your participation mark. Students who miss more than 4 classes without a medical note will forfeit their participation mark. A student who is consistently late for classes will be marked as absent.

### Assignments

There are a total of 6 assignments due in the course that are worth 20% of your final grade. These are meant to complement the course material and to facilitate application and integration of knowledge gained from lectures and readings.

- All assignments will be available on the course cuLearn one week ahead of their due date.
- The international (metric) system of units should be used in all categories of coursework.

### Term paper

The term paper will provide students an opportunity to explore the biogeography of a plant or animal species native to Ontario. Students will conduct a literature review; and will organize findings in a coherent paper (20%). You should e-mail me your term paper topic by **Oct 11<sup>th</sup>** 8:00 pm. Submit the final version of your term paper by **Nov 29<sup>th</sup>** 8:00 pm. Note that you will submit your term report in digital form by uploading it to the cuLearn term paper dropbox. You are to name your file with your first name followed by the name of the assignment (eg. Kevin-GEOG3104-TermPaper). Late papers will be penalised 10% per day.

### Exams

Exams will cover lecture and lab materials. Only students who have made prior arrangements with the instructor, or students who have contacted the instructor within 5 days of the missed exam with a valid doctor's note explaining why they missed the exam will be permitted to write the make-up exam. The final exam is not cumulative, it will only cover materials discussed after the midterm.

## COURSE POLICIES

### Late Assignments

Late assignments will be penalized by subtracting 10% per day (including Saturday and Sunday) of the total value of the assignment. Students whose assignments are late because of a valid medical reason or family emergency will not be penalized, however, documentation from a family physician or counseling services will be required.

### **Missed Assignments or Exams**

Students who fail to submit an assignment or write the midterm or final exam will receive an automatic grade of zero. The only exceptions will be for instances of significant illness or a family emergency. Students confronted with these circumstances must consult with *Exam Services as soon as they are aware* that they will miss the test.

### **Standards of Written Work (term paper)**

Any assignment submitted should be printed using *word processing software* and checked for spelling and grammar. The overall presentation quality of the assignments will be reflected in your grade.

### **Academic Integrity**

Academic integrity is a necessary foundation for all meaningful scholarly activity and verified instances of intellectual dishonesty will be dealt with in full accordance with the procedures laid out in Academic Integrity Policy. Additional information regarding what constitutes plagiarism may be found on Carleton University web site: <https://carleton.ca/secretariat/wp-content/uploads/Academic-Integrity-Policy.pdf> The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

**Pregnancy obligation:** write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website: <http://www.carleton.ca/equity/>

**Religious obligation:** write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website: <http://www.carleton.ca/equity/>

**Academic Accommodations for Students with Disabilities:** The **Paul Menton Centre** for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your **Letter of Accommodation** at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (*if applicable*) at <http://www.carleton.ca/pmc/new-and-current-students/dates-and-deadlines/> You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at <http://www.carleton.ca/equity/>

**Students representing Carleton University, Ontario or Canada** (at academic or sports events):

I fully support students involved with organizations and teams that travel during the semester; however, with this privilege comes additional responsibility. You are responsible for providing formal documentation identifying the organization you represent and potential schedule conflicts with this course.

In the event that you are travelling and unable to attend an exam, you must schedule a secondary exam before you depart. Without proper documentation, a missed exam will earn zero points.

### HINTS FOR SUCCESS

It is in your best interest to attend class regularly and to participate in class. Try to keep up with your readings and address questions you have on the subject matter at the appropriate time rather than waiting until just before the midterm and final for clarification.

This course moves quickly through a large amount of material in a short time. Try to keep up with your readings and address questions you have on the subject matter at the appropriate time rather than waiting until just before the midterm and final for clarification.

### IMPORTANT DATES

Oct 13	e-mail the instructor your term paper species
Oct 18	Midterm exam
Nov 29	Submit your term paper as Word document. You will submit it by uploading it to cuLearn term paper dropbox.
Dec	Final exam (Room: TBA)

## PRINCIPLES OF BIOGEOGRAPHY (GEOG3104) Fall term 2017 Course Outline

Week	Lecture	Lab	Readings
Sep 6	Introduction to course <b>Distribution of Research Paper Guidelines</b>	<i>NO LAB</i>	Ch. 1+ Ch. 2
Sep 11-13	Introduction to biogeography Environmental control: climate	Lab exercise 1: Morphology and Variation	Ch. 1+ Ch. 2 Ch. 3 (45-60)
Sep 18-20	Environmental control: climate (cont'd) Environmental control: soil	Lab exercise 2: Climate and range <b><i>Lab exercise 1 is due</i></b>	Ch. 3 (45-60) Ch.3 (60-69)
Sep 25-27	Environmental control: soil (cont'd)	Lab exercise 3: Soil properties <b><i>Lab exercise 2 is due</i></b>	Ch.3 (60-69)
Oct 2-4	Niches, communities, and biomes	Lab exercise 3 (cont'd): Soil properties	Ch.3 (70-73) + Ch.4 (133-145)
Oct 9-11	<b><i>OCT 9: STATUTORY HOLIDAY. UNIVERSITY CLOSED.</i></b> Oct 11: Disturbance and succession <b><i>OCT 13: Deadline to submit your term paper topic</i></b>	<b>Discussing your term paper topic. <i>Lab exercise 3 is due</i></b>	Ch.5
Oct 16	Succession (cont'd)	<b><i>NO LAB-Midterm week</i></b>	Ch.5
Oct 18	<b><i>Midterm Exam in our regular class room</i></b>	<b><i>NO LAB-Midterm week</i></b>	

<b>Oct 23-27</b>	<b>NO CLASS-WINTER BREAK</b>	<b>NO LAB-WINTER BREAK</b>	
Oct 30-Nov 1	Biogeographic range	Lab exercise 4: Forest succession	Ch. 10 + Ch. 13 (377-393)
Nov 6-8	Dispersal, colonization, and invasion	Lab exercise 5: Tertiary range and migrations <i>Lab exercise 4 is due</i>	Ch.7 (191-205) Ch. 8 + Ch. 13 (394-404)
Nov 13-15	Island biogeography	Lab exercise 6: Late Quaternary range and migrations <i>Lab exercise 4 is due</i>	Ch. 14 (428-450)
Nov 20-22	Cultural biogeography	<b>Q&amp;A session: term paper</b> <i>Lab exercise 6 is due</i>	Ch. 12
Nov 27-29	Biodiversity and conservation	<i>NO LAB</i> <b>DEADLINE FOR TERM PAPER SUBMISSION (20%)</b>	Ch. 14 (406-428)
Dec 4-6	<b>Dec 4: General Q &amp; A session related to the course final exam</b> <b>Dec 6: NO CLASS</b>	<i>NO LAB</i>	
<b>Dec</b>	<b>FINAL EXAM (TBA)</b>		