

BIOL 4000 - Biogeography**Spring 2012**

Instructor: Dr. Ann Kohlhaas

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Office hours: Tuesdays & Thursdays 1:30 – 3 pm; and by appointment.

Lecture: MWF 11 – 11:50 am, N221

Textbook: Biogeography (4th ed.) by Lomolino, Riddle, Whittaker, and Brown

The following schedule is tentative and subject to change. Major changes are not expected. The indicated chapters are reference reading from the textbook.

<u>Date</u>	<u>Subjects</u>	<u>Chapter</u>
Jan 27	Introduction to Biogeography	1

Jan 30	History of Biogeography	2
Feb 1	Ecology – Basic Principles	3,4
Feb 3	(cont.)	

Feb 6	Ecology – Abiotic Factors	3,4
Feb 8	Ecology – Biotic Factors	3,4
Feb 10	Geography of Natural Communities	5

Feb 13	Quiz 1 (50 pts.) + Historical Biogeography	
Feb 15	Historical Biogeography: introduction	8,9
Feb 17	Geological History	8,9

Feb 20	Geological History (cont.)	
Feb 22	Plate Tectonics	8,9
Feb 24	Plate Tectonics (cont.)	

Feb 27	Quiz 2 (50 pts) + Speciation	
Feb 29	Speciation	7
March 2	Speciation (cont.)	

March 5	Extinction	7
March 7	Dispersal & Immigration	6

March 9	Dispersal (cont.)	

March 12	Quiz 3 (50 pts.) + Geography of Diversification	
March 14	Geography of Diversification	10
March 16	Geography of Diversification	10

March 19	(cont.)	
March 21	Reconstructing Histories	11,12
March 23	(cont.)	

March 26	Quiz 4 (50 pts.) + Island Biogeography	
March 28	Island Biogeography	13, 14
March 30	NO CLASSES	

April 2	Island Biogeography	13, 14
April 4	(cont.)	
April 6	(cont.)	

April 9 – 13	SPRING BREAK	

April 16	Island Biogeography (presentation topics due)	
April 18	Quiz 5 (50 pts.) + Large Patterns	
April 20	Large Patterns in Diversity	15

April 23	(cont.)	
April 25	Applied Biogeography	16, 17
April 27	Presentations	

April 30	Presentations (last chance extra credit)	
May 2	Presentations	
May 4	Presentations	

May 7	Presentations	
May 9	Presentations	

May 11 Quiz 6 (50 pts.)

May 14 Overview

May 18, Friday, 11:15 am FINAL EXAM (100 PTS.)

Objectives:

- learn the ecological, historical, and organismal processes that affect distributions
- examine patterns of diversity and the processes involved in those patterns
- examine the practical applications of biogeography
- review current literature in biogeography

Grading:

6 midterm quizzes (lowest dropped), 50 pts. each	250 pts.
1 presentation	50 pts.
<u>1 final exam, 100 pts.</u>	<u>100 pts.</u>
Total	400 pts.

Grades will be assigned on a percentage of the possible points earned, thus
A = 90+%; B = 80-89.5%; C = 70-79.5%; D = 60-69.5%; F < 60 %.

NOTE: there will be no “+” or “-” grades given. Also note that Credit/No Credit is not an option for this course.

Quizzes: Quizzes will be on material presented in lectures, student presentations, and readings from the textbook. Exam format may include essay questions, definitions, short answers, fill in the blanks, and multiple-choice. Always bring scantron 882-ES. The final exam will be comprehensive. Note that your highest five quiz grades will be used in the calculation of your final grade. Quizzes will only be given as scheduled. A quiz missed for any reason will automatically be the lowest and thus dropped grade.

Final Exam: This will be comprehensive. Much of the exam is likely to come from the quizzes.

Presentations: Presentations of a relevant topic for class. Your total presentation will include a written abstract, a written outline, and an 8 – 10 min. Powerpoint presentation. More details on these requirements will be given later.

Grading will be strictly on preparedness and knowledge of the paper’s contents. Level of nervousness will not be graded. However, you are expected to present in as professional a manner as possible.

The presentations must be on research papers (at least 6 pages long) published in scientific journals in 2011 or 2012. I suggest you look first in the journals Journal of Biogeography, Diversity and Distributions, and Global Ecology and Biogeography. These are completely available to you online via our library (i.e. www.csustan.edu → library → electronic journals). Articles from other journals will also be considered.

NOTE: the papers you are presenting must be pre-approved by me. For scheduling purposes, I am requiring that everyone submit their first choices of papers to me by April 16 at the beginning of class time. Sooner is better and I will give priority to those who bring their requests first. However, do not be too quick to choose papers on titles alone, as some papers are difficult to understand.

→When you think you have a paper that you want to present, bring a pdf copy of the first title page.

Participation: Points will also be given for participation in the course. At its most basic, participation includes attendance and attentiveness. Even better, it includes contributing any comments or questions that you may have. Points will be lost for lateness, nonattendance, and inattentiveness.

Extra Credit: You can earn up to 20 points extra credit for writing an extra abstract or participating in a conservation project for at least half a day. Any work done for extra credit must be preapproved by your instructor. No extra credit will be approved after April 30.

NOTE:

- Late materials will be deducted 10 % points for each weekday late.
- Any instance of cheating or plagiarism will result in an automatic F in the course.