

BIOGEOGRAPHY (GEOG/GEOL/NRES 308)

Fall 2011 SYLLABUS

The purpose of this course is to provide an understanding of biogeography, which is the study of the factors that influence the distribution and diversity of organisms on Earth, including the role of both modern processes and historical influences. Biogeography is highly interdisciplinary and integrates ecology and evolution, climatology, and geology.

The prerequisites for this course are GEOL101 (Introduction to Physical Geology) or GEOG155 (Elements of Physical Geography) or BIOS101 (General Biology).

INSTRUCTOR:

Dr. Sheri Fritz

302 Bessey Hall

sfritz2@unl.edu

(402)-472-6431

Office hrs: T 3:30-4:30 or by appointment

MEETING TIMES and PLACE: Tuesday, Thursday 2:00 – 3:15 PM in 203 Burnett

RECOMMENDED TEXTBOOK:

- *Biogeography: Space, Time, Life*, G.M. MacDonald, J.W. Wiley Pub. (2003)

LEARNING OBJECTIVES & EXPECTED OUTCOMES:

General:

- Understanding of the scientific method, especially as it applies to discerning environmental patterns and processes.
- Ability to clearly present and provide support for scientific ideas.

Specific:

By the end of the course students should be able to:

- Evaluate the factors affecting the distribution of species and communities across space and through time
- Apply principles of biogeography to understand processes in the contemporary world, particularly issues related to conservation of species and ecosystems
- Interpret and critique biogeographic data presented in the media or scientific literature
- Develop testable hypotheses and evaluate data to address biogeographic questions

ATTENDANCE:

I expect you to attend every class meeting. Attendance and class participation are a portion of your grade (10%), and you will be penalized if you repeatedly miss class without a legitimate

reason. **If you miss class YOU are responsible for informing yourself about missed announcements and material covered.** You will need to get the lecture notes from another student and check Blackboard for any announcements, handouts, etc. Assignments and exams must be turned in as scheduled, unless there is a legitimate reason for your absence. **Legitimate reasons** for absence include: your sickness, your child's sickness, bereavement, attendance at a funeral or job interview, attending a professional conference, or a similar activity **for which you had no control of the timing and for which you can provide documentary evidence.**

The following reasons for absence are considered **unacceptable**: pressure of work, meetings with your advisor, sports practices, other classes, work, or any scheduled activity (if it's a regular activity, you shouldn't have scheduled a conflict; if it's by special arrangement, you should have said no), and vacations, including family vacations (arrange your vacations during the official university breaks).

ACADEMIC HONESTY:

Intellectual dishonesty (e.g., cheating, plagiarism, etc) is viewed very seriously and will not be tolerated. Any of the following may result in an automatic F for the course and a report to the Office of Student Judicial Affairs: cheating during an exam; copying all or part of a homework assignment from another student in the class; allowing another student to copy your homework; copying all or part of an assignment off the Internet or other source. **Copying paragraphs, sentences or even portions of sentences directly from a web source, from a journal article, or a book constitutes plagiarism and is completely unacceptable.**

If you are unsure of what constitutes academic dishonesty, then ask me or consult the following site on the web, which describes types of academic dishonesty, how to avoid it, and the consequences at UNL: http://www.unl.edu/ous/academic_tips/integrity.shtml

GRADING:

There are **THREE** parts to the grade for this class: **exam scores** (40%), **written and oral exercises and projects** (50%), and **class participation** (10%). Letter grades will be assigned applying a decimal scale (e.g., 80–82 = B-; 83–86 = B; 87–89 = B+).

- The **exam grade** (40%) will be determined based on the results of two take-home examinations scheduled during the semester, each worth 20%. NOTE: There **will not be a final exam** during the scheduled final exam period.
- Several **written class exercises and projects** (50% total) will be assigned during the semester. These will include a substantial project at the end of the semester that integrates course material as applied to issues in conservation biology.
- **Class attendance and participation** in class discussions (10%) is expected of all students. I know that people have varied comfort levels with talking up in a classroom setting, but oral participation is a skill that can be learned. I also recognize that people in this course have very diverse training in the sciences. An essential part of training yourself as an educated individual is learning to ask questions; thus appropriate preparation for class includes thoughtful questions about aspects of a subject that you don't understand.

POLICIES FOR MAKING UP FOR MISSED EVENTS AND LATE ASSIGNMENTS:

No makeup exams, homework assignments, group project assignments, or alternatives to in-class discussions will be granted. In the case of legitimate absence on an exam day, students are expected to arrange to take the examination **early**.

Late assignments will not be accepted without the instructor's authorization, which must be requested prior to the due date. If you receive authorization to turn in a **late assignment**, your grade on that assignment **will be reduced by a maximum of 5% per day**. Exceptions to this policy will be made only in the event of true emergencies, such as hospitalization or the sudden death of a family member. “The computer ate my file” and “my printer didn’t work this morning” are not acceptable excuses.

EXTRA CREDIT:

No extra credit will be offered to individuals. If it is offered, it will be offered to everyone.

SPECIAL PROBLEMS:

All students: Please let me know if major personal, family, health, disability, or similar problems are affecting your attendance or performance. There are many options available for genuine cases of serious problems, ranging from alternative assignments to incomplete grades to university services.

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

NOTES ON SUCCEEDING IN THIS COURSE:

I have structured this course in such a way that all students have an equal opportunity to succeed. I strive to treat everyone fairly and to base grades upon objective academic criteria. Students who include academic dishonesty, chronic absenteeism, or habitual excuses in their academic repertoire will find this course difficult.

That said, I am very willing to help students who are having difficulty with the course, providing they regularly attend class and come prepared and willing to try. In most cases the grade earned is a direct reflection of the effort put into the course. If you are having difficulty or feel that you need additional help, please come and talk to me about it. Your education is an investment in your future. I encourage you to make the most of it and learn as much as you can.

***The instructor reserves the right to change the syllabus and any policies related to this class at her discretion. Any changes will be announced during class and provided in writing on Blackboard

TENTATIVE CLASS SCHEDULE - GEOG/GEOL/NRES 308 - FALL 2011

DATE	LECTURE TOPIC	TEXT
Tues. Aug. 23	Introduction	
Thurs. Aug. 25	Biogeographical Patterns	
Tues. Aug. 30	Biogeographical Controls (Biotic and Abiotic)	Ch. 3, 4
Thurs. Sept. 1	Species Diversity, Communities, Biomes	Ch. 6
Tues. Sept. 6	Dispersal, Migration, Colonization	Ch. 8
Thurs. Sept. 8	Disturbance	Ch. 5
Tues. Sept. 13	Patterns of Diversity, Island Biogeography	Ch. 14
Thurs. Sept. 15	Microevolution and Macroevolution	Ch. 9
Tues. Sept. 20	Microevolution and Macroevolution	
Thurs. Sept. 22	Review	
Tues. Sept. 27	TBA	
Thurs. Sept. 29	TBA – Take Home Exam #1 Due	
Tues. Oct. 4	Earth history, plate tectonics	Ch. 7
Thurs. Oct. 6	Biogeographic Provinces, Faunal Exchange	Ch. 10
Tues. Oct. 11	The Pleistocene	Ch. 11
Thurs. Oct. 13	Pleistocene Extinctions	
Tues. Oct. 18	Fall Break – No class	
Thurs. Oct. 20	Historical Process on Islands	
Tues. Oct. 25	Tropical Biodiversity, Pollen Exercise	Ch. 14
Thurs. Oct. 27	Molecular tools, phylogeography	Ch. 13
Tues. Nov. 1	Museum Exercise	
Thurs. Nov. 3	Discussion - Phylogeny	
Tues. Nov. 8	Design of Nature Reserves; Groups meet	Ch. 15
Thurs. Nov. 10	Discussion - Extinctions, IUCN Red List	
Tues. Nov. 15	Climate Change; Take Home Exam #2 Due	
Thurs. Nov. 17	Invasive Species, Groups meet	
Tues. Nov. 22	Invasive Species - Discussion	
Thurs. Nov. 24	Thanksgiving - No class	
Tues. Nov. 29	Managing Species & Ecosystems- Presentations	
Thurs. Dec. 1	Discussion: Biogeography and the Future	
Tues. Dec. 6	No Class	
Thurs. Dec. 8	No Class - 4PM Final paper due	