Geography 418/618 and Biology 418/618 BIOGEOGRAPHY
Autumn 2017
Lecture section (no lab) 3 credits

Time/Place: 1-2 PM Murie Building room 103

Instructor: Dr. Daniel Mann, Geography Program, Department of Geosciences, UAF
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Office: 366 Reichardt Building
Phone: 474-6929

Office Hours: immediately after lecture or by appointment

Course Description
Biogeography is the geography of life. Hence it is a broad topic with relevance to many other disciplines. In this class, I emphasize the biogeography of polar and alpine regions. We pay special attention to the effects of climate change on biogeography. Throughout this course, I stress the influences that humans have on the biogeography of other species. Lectures emphasize aspects of biogeography most relevant to Alaska. The assigned readings come from recent scientific literature and contribute to a geographically broader perspective.

Undergraduate and graduate sections are taught concurrently. This is a writing-intensive course in which the majority of the graded work involves written material (see below). Geography/Biology 618 requires extra readings and expanded writing assignments.

Course Prerequisites
BIOL 271 Ecology, GEOG 339 Mapping and Landscape Analysis, GEOS 401 Geomorphology, or instructor’s permission. Foreign students are encouraged to attend this course, regardless of whether their prior training conforms exactly to these prerequisites.

Course Objectives
This is a capstone course for upper division Geography, Geology, and Life Sciences undergraduates and graduate students. In addition to learning the basics of biogeography, students will gain extensive experience synthesizing, integrating, and then writing about what they learn in the lectures and read in the literature.

**Instructional / Teaching Methods**
This is primarily a lecture course; in addition there are two, one-day field trips. Readings come from published articles and book chapters in the current scientific literature. There are several guest lecturers over the course of the semester.

This is a writing-intensive class that emphasizes critical thinking and creative question-asking. The primary writing task is a weekly essay that is due every Monday starting in the second week of class. These essays consist of two typewritten pages for undergraduates and four pages for graduate students. In these essays, students synthesize the lectures and assigned readings from the previous week and integrate them with their personal experiences and perspectives. Creativity is a priority, and a wide degree of “topic wander” is tolerated. I edit every essay in detail and attempt to answer the series of novel scientific questions that students are asked to generate in each of their essays. In addition to the weekly essay, approximately 75% of the midterm and final examinations consist of essay questions, and each student writes a 2-4 page report describing the results of the field trips. A personal conference takes place with each student in the course of the semester during which we discuss their writing’s strengths and weaknesses and design strategies for improvement.

**Learning Methods / Student Assignments:** Lectures and readings provide a sound background in biogeographic processes and patterns. Readings consist of two journal articles every week for undergraduates and 4-5 articles weekly for graduate students. Active participation in class discussions is required. The required, weekly essays help synthesize lecture material with the readings, serve as another channel of communication between the instructor and the student, and improve the students’ communication and critical-thinking skills.

**Required Text:** There is no textbook; all readings are from the scientific literature. Readings are posted in the class DROPBOX account.

**SCHEDULE OF LECTURES, EXAMINATIONS, AND TERM PAPER**
See detailed lecture schedule and reading assignments posted in the class DROPBOX.

Assignments and Grading:
Midterm Exam: 30%
Final Exam: 30%
Class Participation (attendance + discussion): 10%
Weekly essays: 30%

Attendance: attendance in lectures and on the two field trips is mandatory.

Course grades will be assigned as indicated at the table below. Course %’s are for this course only and may vary with different instructors. Grade point values are indicated on the table as well. Please see “Academics and Regulations” section of UAF 2007-2008 Catalogue.

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<td>A 96-92</td>
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Course Grading Scale: All grades are determined on an absolute score (with no curve) according to the following scale:
A = 90-100 percent: outstanding work, mastery of topic
B = 80-89 percent: above average work, all assignments completed well
C = 70-79 percent: average, all or most assignments completed, most work satisfactory
D = 60-69 percent: pass, unsatisfactory or missing work
F = less than 60 percent: failure to meet requirements of course

**Support and Disabilities Services:** The UAF Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. The course instructors will work with the Office of Disabilities Services to provide reasonable accommodation to students with disabilities. Please notify the instructor of any special needs.

**Plagiarism/Academic Integrity:** University Standards and Policies apply (see UAF Catalog).

**Extra Credit:** Extra credit is not an option in this course except under very unusual circumstances.

**Information on Exams and Assignments:** Examination format will include a mixture of multiple choice, short answer / diagram / map, and essay.