# BIO409 BIOGEOGRAPHY Spring 2007

**Instructor: Dr. Charles Acosta** 

Office: SC 346

Office Hours: T 3:00-4:00; W 11:00-12:00, or by appointment

Phone: 859-572-5300

Email: acostac@nku.edu (include in Subject line: "BIO409")

**Class**: TR 10:50-12:05 in SC304

**Textbook**: Lomolino, Riddle & Brown. Biogeography. 3<sup>rd</sup> edition.

Sinauer & Associates Publisher; ISBN 0-87893-062-0

#### **COURSE OVERVIEW**

Our goal is to study the distribution of life on earth, synthesized from our understanding of multiple scientific disciplines including Ecology, Evolution, Physiology, Systematics, Limnology, Oceanography, Geology, Geography, and Conservation Biology.

#### STUDENT LEARNING OUTCOMES

Students will:

- 1) Discuss the development of historical and ecological biogeography.
- 2) Demonstrate a complete understanding of principles drawn from various scientific disciplines as applied to biogeography.
- 3) Critically read and interpret the scientific literature on biogeography.
- 4) Write cohesive arguments and expositions of biogeographic principles.
- 5) Discuss applications of biogeography to conservation and scientific advancement.

### **COURSE FORMAT**

#### Blackboard

Students should login regularly into the course shell on Blackboard for Announcements, Assignments, Course Documents, and adjustments to the schedule posted to the syllabus in Course Information.

#### • Lecture

Students must read the assigned chapters and research papers prior to attending class. Class periods will consist of both lecture and discussion of topics.

#### • Written Assignments

Students will write short essays on assigned primary literature papers and speaker seminars. Assignment descriptions will be posted on BlackBoard Assignments. The format for written assignments is precisely:

Title page: Title, Your Name, BIO409 Biogeography, Spring 2007

Abstract page: Brief summary of overall topic; 200 words or less.

Review of Topic 1-2 pages: concise review of important points of paper or seminar

Synthesis of Topic 1-2 pages: critical discussion of topic

<u>Literature Cited</u>: proper citation of all associated papers.

Written assignments must be typed in 12 point font and double-spaced. Multiple pages must be numbered. It is essential that you proofread and edit written assignments for errors in format, punctuation, grammar, and spelling. All assignments must be turned in on their due date. No late work will be accepted. Do not turn in written assignments by email.

#### Assessment

There will be three examinations on essential concepts and principles. These tests will be standard multiple choice, definitions, and short essays. Grading for 4 assignments (10% each) and 3 examinations (20% each) will be distributed on the A-F scale.

#### GENERAL CLASS POLICIES

#### • Important dates

**January 29, 2007** – last date to drop the course.

March 26, 2007 - last date for withdrawal from the course with a "W" grade.

## • University Policies

- All policies, rules, and regulations apply, as stated in the NKU Student Handbook. Students are required to read the University Honor Code and Code of Student Rights & Responsibilities. See: <a href="https://www.nku.edu/~deanstudents/policies.htm">www.nku.edu/~deanstudents/policies.htm</a>
- Grades cannot be given to students over the phone or via email.
- Study: At minimum, you should spend 3 hours study time for each hour of class time; therefore, you should be prepared to spend at least 9 hours per week preparing for this course. More time spent generally results in a higher course grade.
- Disruptions: Any behaviors that are disruptive to student learning will not be tolerated. Loud personal conversations are particularly disruptive to other students who are focused on learning. Please turn off cell phones and beepers during class time.
- Please come to class on time. Also, please resist the urge to pack your belongings before the class ends. This is particularly inconsiderate and disruptive, especially when student groups are holding discussions.
- Visitors are welcome to this class if extra seats are available. If you must bring young children with you, please sit in the back of the class near the rear door so that you can leave if they become disruptive.

# BIO409 Biogeography Fall 2007 - TENTATIVE SCHEDULE

WEEK OF		TOPIC	ASSESSMENT
January	8-12	Chapter 1: Introduction	
		Chapter 2: History	
	15-19	Chapter 3 Physical Setting	
	22-26	Chapter 4 Geography & Distributions	Assignment 1
February	29-2	Chapter 5 Communities	
	5-9	Chapter 6 Dispersal	
	12-16	Chapter 7 Speciation & Extinction	Exam 1
			(Chap. 1-6)
	19-23	Chapter 7 continued	
March	26-2	Chapter 8 Plate Tectonics	Assignment 2
	5-9	Spring Break	
	12-16	Chapter 9 Glaciation	
	19-23	Chapter 10 Endemism & Disjunction	Assignment 3
	26-30	Chapter 11 & 12 Reconstruction	
April	2-6	Chapter 13 Island Biogeography Patterns	Exam 2
			(Chap. 7-12)
	9-13	Chapter 14 Island Biogeography Evolution	
	16-20	Chapter 15 Diversity Gradients	
	23-27	Chapter 16 Extinctions	Assignment 4
		Chapter 17 Conservation	
May	3		FINAL EXAM
			(Chap. 13-17)