# Introduction to Biogeography BIOL 3810 and 5810 Spring 2013

Tuesday & Thursday, 2:00-3:15 pm

#### Lecturer

David L. Bechler

dbechler@valdosta.edu

Office: Room 2030, Bailey Science Complex Research laboratory: Room 2050, Bailey Science Complex Phones: personal office 293-6063; main Biology office 333-5759

**Office hours:** 8-9:30 am M-F, Note—I may be in the research labs (BC 2050 or 1088) or in the field conducting research on Monday and Wednesday so cannot be reached.

#### **Textbook**

Cox, C.B. and P.D. Moore. 2010. Biogeography, an Ecological and Evolutionary Approach. Blackwell Publishing Co. Malden, MA. 428 pg.

#### **Course Description**

Prerequisites: Three of the following courses, GEOG 1112, GEOG 1113, BIOL 2010, BIOL 2230, BIOL 2270. An overview of factors controlling the distribution of plants and animals on the earth. Topics discussed will include ecological and evolutionary processes, geophysical and climatic phenomenon, and historical and anthropogenic events that have influenced current distributions.

## **Course Objectives**

- 1. Develop in the student an appreciation for the wide array of factors and events that control the distribution of plants and animals on the surface of the earth.
- 2. Develop in the student an appreciation for how the inter-relationships of biological, geological and climatic factors influence an organism's distribution.
- 3. Develop in the student an appreciation of the impact human activities have had on past and present distributions of organisms, and what impact human activities may have on future distributions.

The above course objectives meet Biology Department Educational outcomes 2 (evolutionary processes responsible for biological diversity), 4 (Structure and function of DNA), and 5 (Role of ecology in behavior, population structure and function, communities and ecosystems, and human impacts).

## **Topics and Subtopics from the Textbook**

**Note 1**, not all pages and subtopics within a chapter will be covered in class. Specific readings will be given in class as needed to understand the material and prepare for tests.

**Note 2**, the list of topics is tentative and may be changed as needed over the course of the semester.

**Topics** 

Chapter	Pages
Introduction to Biogeography	1-13
History of Biogeography	15-43
Patterns of Diversity	45-71
Patterns of Distribution	73-116
Communities and Ecosystems	119-142
Source of Novelty	143-162
Life, Death and Evolution on Islands	165-197
Living in the Past	201-222
Geography of Life Today	225-258
Ice and Change	261-297
Transforming the Planet	297-316
Drawing Lines in the Water	319-350
Interpreting the Past: I. Molecular and Isotopic Biogeography	353-369

#### **Tests and Posters**

- **Semester tests** and the **Final** will be multiple choice tests using a scantron sheet filled in with a number 2 pencil
  - Two semester tests and a comprehensive final will be given.
  - The time of the semester tests will be announced one week prior to them being given, but the first test will be before midterm.
  - The **final**, 1 May 2013, 2:45-4:45 pm.

## **Grading Scale and Grade Determination**

**Scale:** A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = 0-59.

**Note:** There will be no extra credit projects.

#### **Undergraduate Students**

#### Weights of tests

Semester tests 30% eachFinal examination 40%

• Grade = 0.3(semester tests 1) + 0.3(semester test2) + 0.4(Final) + 0.2(Poster Grade)

#### **Graduate Students**

#### Weights of tests and presentations:

Semester tests 25% each
Final examination 30%
PowerPoint presentation (PPT)\* 20%

• Grade = 0.25(semester tests 1) + 0.25(semester test2) + 0.3(Final) + 0.20(Presentation)

\*Graduate Student PowerPoint Presentation—each graduate student will be given a topic to research during the semester. The topic will be developed form primary and secondary sources of literature and developed into a PowerPoint presentation which will be given on the last class day.

#### **Academic Dishonesty and Plagiarism**

Academic dishonesty and plagiarism—the written information placed in the poster must be in your own words and written solely by you as a member of the team to which you belong. Therefore, all written materials will be examined for plagiarism. If you wish you may quote from publications, but you must acknowledge your sources by citations and with quoting a paper, place the quotes in quotation marks or in parentheses. For additional information see web site: <a href="http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml">http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml</a>

If an individual is caught plagiarizing a source of information, they will be given a grade of "U" for the course and a **formal complaint** filed with the office of the dean of students. To test for plagiarism, known sources of literature will be examined for copies that match in part or in total the papers you must submit.

#### **General Information**

**Food and Drinks**: Food and drinks are not allowed in the classrooms in this building. Please do not bring drinks into the classroom.

**Disabled Students**: Students requiring special classroom accommodations or modifications because of documented disabilities should discuss their needs with me at the beginning of the semester and if need be see the Access web page at (<a href="http://www.valdosta.edu/access/facresources.shtml">http://www.valdosta.edu/access/facresources.shtml</a>) which provides the following statement. "Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in room 1115 Nevins Hall" The phone numbers are 245-2498 (voice) and 219-1348 (tty).

**Buckley Amendment or Privacy Act**: It is illegal to release to others personal information about an individual. Therefore, grades, averages, and other personal information about an individual will not be released to anyone but that individual, posted, sent by e-mail or given over the phone.

Class Attendance and Behavior: When I am lecturing, I expect students to behave themselves and maintain silence; however, your questions are encouraged. Students who repeatedly make noise and disrupt the class will be removed from the class and if necessary dropped from the course. You are now preparing for your future, and successful completion of this course may determine your future job prospects. Class disruption is rude and inconsiderate of others who are trying to learn. Therefore, good behavior in class is expected, for you are now an adult and you should behave as such.

While class attendance is not formally taken each period, I will note when individuals are absent, and if absences are excessive I reserve the right to administratively drop a student from the course. It is your responsibility to attend class regularly, arrive on time and get

the notes and assignments as presented in class. If problems develop so you cannot attend class, please contact me. Cell phone use in class is not permitted, and they must be turned off.

#### **Important Dates**

• 21 January MLK Day. No classes

• 28 February Midterm. Last day to drop classes\*

• 18-22 March Spring Break. No classes.

### **General Note**

Generally, I will be available after class for consultation. Other times can be arranged by appointment or you can take your chances and just drop by to see if I am in the office. My spring 2009 teaching schedule is next to the door of my office. I frequently have meetings in the afternoon so this time period will not be a good time for you to try and see me. Please do not call me at home. As a field biologist, I spend certain amounts of time in the field collecting data. In spring 2013, most of my field work will take place on Mondays and Wednesdays. Once I leave the office and go home, my life belongs to my family (my wife, Adelaide, Madison and Bella) and me.

<sup>\*</sup> No one will be dropped after the last drop date unless there are extenuating circumstances beyond your control.