IB 108 The Biology of Dinosaurs (J Marcot edition)

Course Overview

This course will cover the origin, diversity, and extinction of dinosaurs as a conceptual framework to explore fundamental principles of biology. We will consider dinosaurs as animals, and discuss modern theories of dinosaur physiology and metabolism to explain what is known of their lives and behavior. We will explore how the processes of evolution and speciation lead to the vast number and variety of dinosaurs, and ultimately how they gave rise to birds. Finally, we will consider how the Earth and its environments changed during the 180 million year reign of the dinosaurs, and lessons that can be learned about environmental change on human timescales. A special emphasis will be placed on how scientists collect and evaluate data from the fossil record, and how understanding living organisms are crucial in their interpretation.

Course Objectives

By the end of this course, students will:

1. Understand fossils, the process of fossilization, and the fossil record
2. Understand geologic time, and how geologists determine the age of rocks
3. Understand the changing world of the dinosaurs
4. Have a working knowledge of evolution, phylogeny and classification
5. Identify the essential elements of the dinosaur skeleton
6. Recognize the place of dinosaurs among other extinct animals
7. Recall the origin of and diversity of dinosaurs
8. Be able to explain the extinction of dinosaurs and the subsequent radiation of mammals and birds in its aftermath.

Academic Calendar

A course week is defined as the period between Monday, 12:05 AM Central Time and Sunday, 11:55 PM Central Time.

For more information, see the University's Academic Calendar.

This is a three credit hour course. The course is eight weeks long and consists of seven content modules. Please be aware that this course is accelerated in nature; 16 weeks' worth of content will be covered in a seven-week time span. You should dedicate approximately 12-16 hours per week to working on the course itself, but actual time commitments will vary depending on your input, needs, and personal study habits. You are required to log on to the course website and checking your email a minimum of four days per week, but as discussions develop, you will probably need to do so more frequently.
Required Texts

You can order the required textbook from the Illini Union Bookstore (IUB) (217-333-2050). Be certain you select the correct term from the Search by Course dropdown list. Used books are often available and can be provided at a cost savings to you. Note that the cost and postage for all books must be prepaid. You can charge your order using VISA, Discover, or MasterCard. If you are ordering books elsewhere (e.g., Amazon.com), please be sure to order the correct edition and year of publication.


- ISBN-10: 1316501159

Course Components

This course will consist of the following components:

**Weekly Overviews**

Each week will begin with a weekly overview, which will explain what the module is about, what learning goals you are expected to achieve, how long the module will take, and in what activities you will participate. Each week is designed with the same structure and activities unless otherwise specified. Weekly instructional activities are explained in greater detail below. Due dates of specific assignments appear on each week's overview page.

**Readings and Lessons**

Each module will contain a list of lessons (recorded lectures) and assigned readings. In some cases, optional or supplemental readings may be listed for further study. Lessons cover major topics from the readings but do not necessarily include all important information from the readings.

**Discussions**

Discussions will provide an opportunity to engage with your classmates and instructors on one or more topics explored that given week. Weekly content discussion forums are another ripe place to engage with one another as you wrestle with the content covered in the week.

**Activities**

Weekly activities will reinforce concepts presented in the lectures and readings and give you an opportunity to explore these concepts in greater depth.

**Quizzes**
Concluding Weeks 1-7, you will answer questions about the material covered in the week. Each question is worth two points, for a total of 50 points. A student is allowed 30 minutes to complete the quiz.

**Final Exam**

This course includes a 3 hour cumulative Final Exam. See the Exam tab for details.

**Accommodations**

To obtain disability-related academic adjustments and/or auxiliary aids, students should contact both the instructor and the Disability Resources and Educational Services (DRES) as soon as possible. You can contact DRES at 1207 S. Oak Street, Champaign, (217) 333-1970, or via email at disability@illinois.edu.

**Grading**

**Grading Distribution**

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**Grading Scale**

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Academic Integrity
All students are assumed to have read and understood the “Code of Policies and Regulations Applying to All Students,” University of Illinois, and will be expected to act accordingly. The Code is available online at: http://www.admin.uiuc.edu/policy/code/index.html