Course Title: Fossil Record  
Course Number: GEOLOGY 304

Instructor Contact Information
Instructor: Gregory Miles, Ph. D.  
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New Registrations
If you have recently registered for this class, or would like to be registered for this class, and have questions or are in need of assistance, please e-mail the Program Assistant at disted@uoregon.edu. After you register you will receive information via e-mail on how to access the course website.

Introduction
• This online version of Geology 304 is designed for students with limited science backgrounds.
• This course examines the history of life. It is intended for students desiring a one-course summary of earth history specifically as it is interpreted from the record of fossil animals and plants.
• There are no prerequisites for this course.
• Instructor approval is not required to register for this course.
• Wait-listing is now available for online courses. If a course is full, students can add themselves to the wait-list via DuckWeb. Wait-listing FAQ: http://registrar.uoregon.edu/help/waitlisting/faq.
• Students are required to use their “uoregon.edu” e-mail address to correspond with the instructor.
• This course requires independent study with help available from the instructor. There are no class meetings or field trips.
• Students must complete three exams and a course project on or before their respective deadlines. There is no final exam in this course.

Online Course Information
Distance education courses like this one work best for experienced students who are really comfortable with studying and learning on their own. If you are the type of learner who likes the structure of a classroom and who wants direct contact with an instructor, a live class on campus would probably work better for you.

Although Geology 304 is designed for students with limited science backgrounds, we expect students to work hard and learn a lot in this course.

Enrolled students will have access to the entire online course through our Blackboard course site. At a minimum, the work for this class involves studying the online Geology Short Course, then carefully reading the contents of each assigned chapter and working with the study guide questions in our Blackboard course site. These questions are the bases for the exam questions in our course.

Testing and proctoring for this online geology course is administered through the Social Science Instructional Laboratory (SSIL). Visit their website at http://distanceeducation.uoregon.edu for more information. Students living in the Eugene area take their exams at the SSIL facility on the UO campus. The SSIL staff proctors these exams. Off-campus students need to follow the instructions in the SSIL website to arrange for a SSIL-approved proctor for their exams. Exams in this course are taken by computer and consist of multiple-choice questions.

Course Description
Geology 304 online is mainly an overview of the record of fossil vertebrates, or animals with backbones, starting with the earliest known fishes and progressing forward in time to amphibians, reptiles, mammals, and birds. It also treats early life forms, invertebrate animals, and land plants, but with less depth. Assigned readings from the textbook explore the evolution of major groups of vertebrates and the adaptations of these animals to their surroundings.
A Geology Short Course is included in our Blackboard course site. Although the short course is not a mandatory part of Geology 304, students who have not studied geology or who need a refresher will benefit from the short course.

In addition to three proctored exams, this course requires a project in the form of an illustrated term paper, a web page, or a PowerPoint file. Each student chooses a project topic early in the term. Most students choose a topic from the list in our Blackboard Discussion Board, but any topic that is directly pertinent to our course is acceptable. Details of project completion are given in our Blackboard course site.

**Course Objectives**

The principal objective of this course is to learn about the succession of fossil organisms, especially vertebrate animals, through time. To accomplish this goal, students learn basic paleontological concepts and terms that they can apply to their studies from the textbook.

The objectives of this course also include learning about:

- using the geologic time scale to help establish a chronological sequence of vertebrate evolution;
- the morphology (body form) and classification of major vertebrate groups;
- adaptations of organisms to their environments;
- biological inventions such as flight and warm-bloodedness, and adaptations to new habitats such as leaving aquatic habitats and invading land;
- mass extinctions and evolutionary radiations and how they cause major changes in vertebrate faunas.

**Textbook**

ISBN 9780470671726

**Ordering Textbooks**

Course textbooks can be purchased at the UO bookstore in Eugene, either in-person or by placing an order for mail delivery. Questions or problems can be directed to the course books manager, Bruce Lundy at either 541-346-4331 or blundy@uoregon.edu. You will need to make your purchase with a credit card when requesting mail delivery.

**Course Structure**

This course uses the Blackboard course management system. Access information will be e-mailed to students once they have registered for the course. Course information and tools, including detailed Study Guides, are located in our Blackboard course website. For access-related questions or help relating to the course website, contact the Academic Extension Program Assistant at disted@uoregon.edu.

Reading assignments are specified for each exam here and in Blackboard Units 2, 4, and 6.

**Part 1**

Origin and diversity of life, Precambrian fossils, evolution, extinction.
The study guide for Part 1 is located in Unit 3 of our Blackboard course site.
Readings for exam 1:
Chapters 1, 2, 3, 4, 5, 6

**Part 2**

Fishes, amphibians, reptiles, birds, primitive plants.
The study guide for Part 2 is located in Unit 5 of our Blackboard course site.
Readings for exam 2:
Chapters 7, 8, 9, 12, 13, 14

**Part 3**

Mammalian origins and evolution, dinosaur extinction, primates.
The study guide for Part 3 is located in Unit 7 of our Blackboard course site.
Readings for exam 3:
Chapters 15, 16, 17, 20
Examinations

There are three separate exams, each covering roughly one-third of the text material. The second and third exams are not comprehensive, so each exam is a stand-alone test over the assigned portions of the textbook. Exams consist of multiple-choice questions. Exams must be completed in a 2-hour period.

Exams will be taken at designated proctoring locations and are administered by the Social Science Instructional Laboratory (SSIL). See their website for instructions and to schedule exams, available at http://distanceeducation.uoregon.edu.

Exam Deadlines

There are three exams required over the course of term, and each must be completed by a given date. For a current list of exam deadlines refer to the information on the course site.

Discussion Forum

This course uses the Blackboard course delivery system. Included as part of the course website is an interactive threaded discussion forum.

Course Project

- Each student will assemble a course project during the term. The project will consist of information pertaining to the course that has been obtained from a variety of media sources. Each student will choose a topic from a list available in our Blackboard course site, research it online and/or in the library, and write a summary that captures the most essential ideas of the topic. Details of the project, both the written summary and the visuals, are up to the student's own creativity.

- The format of the project is up to the student. Three popular formats are 1) text with embedded illustrations, 2) a web page, and 3) PowerPoint. No matter which format is chosen, the project must contain a summary of at least four net pages of text and at least ten illustrations to qualify for a B grade or higher.

- Students should complete a computer-sensible form of their project and submit it to the instructor, using the directions in our Blackboard course site.

- Additional details pertaining to the project are given in the Blackboard site for this course.

Grades

Course Grades:

Grades are available on Duck Web approximately the week after the last day of finals. Once grades become available, students needing transcripts with current term grades may place an order with the Registrar in advance for mailing. Please refer to the "Transcripts" section of the Office of the Registrar's website.

Exam Grades:

Grades for each exam are available upon submission of the exam, and may be reviewed by following the instructions in the Grading Policies/Exam Grades section of the syllabus in our Blackboard course site. Exams are not returned. The final grade will be determined as follows:

- 1st exam: 30%
- 2nd exam: 30%
- 3rd exam: 20%
- Course project: 20%

Geology Short Course

The Geology Short Course (located in our Blackboard course site) was prepared by Dr. Greg Miles. It provides general background information about the geologic sciences. Students who have not previously taken geology courses, or students who would like a review of general materials, would benefit from this summary.

Accessible Education Center

If you have a documented disability and anticipate needing accommodations in this course, please contact a counselor in The Accessible Education Center. They are located in 164 Oregon Hall, Eugene, Oregon. Phone 541-346-1155. E-mail: uoaec@oregon.uoregon.edu.