

College of Arts and Sciences Department of Geosciences

GEOS 1050 – Earth Through Time

Instructor: Dr. Joshua X. SamuelsEmail: samuelsjx@etsu.eduPhone: (423) 439-7515Office: Ross Hall 306Office hours: Tuesday 10:00 am - 12:00 pm, or by appointment via email

#### **Course Description:**

This course focuses on physical and biological processes which have shaped our Earth over the past 4.6 billion years. The class presents an overview of the methods and disciplines employed to unravel Earth's history, with a focus on fossils and understanding *life through time*.

### **Course Goals:**

- To convey the fundamentals of the scientific process.
- To stimulate critical and scientific thought about empirical phenomena.
- To understand the general processes of evolution and natural selection.
- To understand the general history of geologic time.
- To conceptualize broad patterns in landscape and climate change through time.

**Prerequisites:** There are no university prerequisites for this class, but you are expected to have a *basic* knowledge of science.

# Textbook:

No text required.

Geosciences Majors should get *The Earth Through Time* by Levin and King (11th edition), it will be of use to you in several courses.

# **Class Format:**

The course consists primarily of in class lectures, and evaluation is based on a series of online exams (completed on D2L).

#### Labs:

There are multiple sections of the associated lab course (GEOL 1051) – all in Ross Hall. Your lab instructor will have their own syllabus and *lab is a separate grade*.

**Course Documents:** Most materials for the course may be found under the "*Contents*" page of D2L. PowerPoint slides for each lecture will be available online (these should be considered study aids, and not a substitute for attending class). Please check the D2L site frequently for important announcements.

#### Grading: = 300 pts possible

- *Exams* (x4): 100 pts each
  - There will be three 100-point exams over the course of the semester and a comprehensive 100-point final exam. Exams will be posted online and have questions based strictly on material covered in lecture. <u>The lowest of your exam</u> <u>scores will be dropped to compute your final grade</u>. If you are happy with your scores on the first three exams, you will not need to take the final.
- *Quizzes*: bonus points (2 or 3 points each)
  - There will regularly be quizzes given in lecture. The quizzes will be based on material covered in class that day and will typically consist of fill in the blank questions. Also note that quiz questions regularly appear on exams.

**Grading Scale:** The following percentage scale will be used as a guideline to determine the final course grades based on the points earned:

94-100 = A	77-79 = C+
90-93 = A-	73-76 = C
87-89 = B+	70-72 = C-
84-86 = B	67-69 = D+
80-83 = B-	61-66 = D
	60  or less = F

#### **Course Attendance:**

Science courses are demanding. Students who attend class and study regularly tend to receive an "A", while students who do not attend class or complete assignments do not. You are expected to attend each synchronous Zoom lecture, and I will check attendance reports daily.

#### Academic Misconduct:

Please familiarize yourself with the section on Academic Misconduct at the following ETSU website: <u>http://www.etsu.edu/research/Misconduct\_Policy.aspx</u>

Cheating will not be tolerated in any form (e.g. copying from a classmate, plagiarism). Any case of cheating will be immediately turned over to the Dean of Students for disciplinary action. While quizzes and exams are done online and open book, all work on them must be your own. Keep in mind that D2L collects all kind of data.

#### ETSU Syllabus Attachment:

https://www.etsu.edu/reg/academics/syllabus.php

# **COVID-19 Pandemic Statement**

While I've made a sincere attempt to create a flexible plan for teaching during the pandemic, the reality is that I cannot predict the future. Course meetings, learning activities, and assignments may change if we need to move quickly to a different operational stage of the university's pandemic framework.

This course will be delivered remotely, but you should be familiar with current ETSU health policy: <u>https://www.etsu.edu/coronavirus/health-and-safety/default.php</u> <u>https://www.etsu.edu/policies/health-safety/face-coverings.php</u>

### Guidelines and Advice:

- 1. Please ask me for help at any time. I am here to help you learn and I want you to do well.
- 2. Take thorough notes; these are your keys to success. Note taking will help you concentrate in class and remember what you hear.
- 3. Make sure to read the assigned readings, they will complement my lectures and help you to learn. If possible, you should do the readings <u>before</u> you come to lecture. That way you can focus on understanding the lecture content and not on unfamiliar topics or vocabulary.
- 4. Start studying sooner than later. To do well on the exams, you cannot start studying the night before. The best way to learn is by studying a little each day.
- 5. Try to spend several hours studying out of class for every hour spent in class. Your grade in this and any other course will reflect your study efforts.
- 6. Work together, form a study group. Your grade is not curved and does not depend on anyone else. Studying together will help you with difficult concepts or problems.
- 7. Be an active learner. Don't just memorize information; integrate it into your existing knowledge base.

### Other Things to Remember:

- 1. The instructor reserves the right to alter the course schedule at any time.
- 2. Make-up exams are at the sole discretion of the instructor and will be given only for **excused** absences; please let me know ahead of time to arrange a make-up exam.
- 3. Please do not ask that I change your grade, I will not respond to such a request.

**Mental Health:** Students often have questions about mental health resources, whether for themselves or a friend or family member. ETSU campus resources include: Counseling Center (423) 439-4841; Behavioral Health & Wellness Clinic (423) 439-7777; Community Counseling Clinic: (423) 439-4187.

- If you or a friend is in immediate crisis, call 911.
- Available 24 hours per day is the National Suicide Prevention Lifeline: 1-800-273-TALK (8255).

Week: Dates	Topic	Exams
1:1/20	Introduction to class, What is Science?	
2: 1/25	Development of Historical Geology	
2: 1/27	Minerals, Rocks, and Sediments	
3: 2/1	Plate Tectonics	
3: 2/2	Geologic Time 1	
4: 2/8	Geologic Time 2	
4: 2/10	Fossils and Fossilization	
5: 2/15	Evolution and Classification	
5: 2/17	Exam 1 Review	
6: 2/22		Exam 1
6: 2/24	Origin and Evolution of the Earth	
7: 3/1	Origins of Life	
7:3/3	Paleozoic Earth History	
8: 3/8	Paleozoic Life	
8: 3/10	Mesozoic Earth History	
9: 3/15	NO CLASSES	
9: 3/17	Mesozoic Life 1	
10: 3/22	Mesozoic Life 2	
10: 3/24	Exam 2 Review	
11: 3/29		Exam 2
11: 3/31	Cenozoic Earth History	
12: 4/5	Cenozoic Life 1	
12: 4/7	Cenozoic Life 2	
13: 4/12	The Gray Fossil Site	
13: 4/14	NO CLASSES	
14: 4/19	Life and Death in the Quaternary, Life in the Holocene	
14: 4/21	Human Evolution	
15: 4/26	Life in the Anthropocene	
15: 4/28	Exam 3 Review	
1:1/20		Exam 3
Finals week: 5/3	Final Exam	Exam 4