GOL132L: Earth Through Time Lab - Module 1

CoSM Class Syllabus / Policy

2019 / Spring Semester

GOL 132L.501

The Earth Through Time Laboratory

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Office Hours: This is an online course and office hours will be offered electronically. In office hours Tuesday (1-4), Wednesday (1-4), Thursday (1-4).

The lecture and laboratory portion of this class are both online classes. Please refer to the detailed calendar found as a webpage in this module. There is a mandatory quiz associated with this syllabus, so please read all the information in this unit carefully and then complete the Course Information and Syllabus Quiz in order to proceed into the course material.

Note: this quiz must be completed before any of the course material will be made available, the lecture and lab modules will remain locked until you complete this quiz.

Text and Materials:


Course Description: The Earth Through Time Laboratory (GOL 132L) - One semester hour. The history and development of the continents and ocean basins and the evolution of life on Earth; includes earthquakes and the Earth’s interior, mountain building, drifting of continents and sea-floor spreading, the Ice Ages, space science and oceanography. Co-requisite: GOL 132. Prerequisite: GOL 131.

Program Learning Outcomes: There are no specific program learning outcomes for this major addressed in this course. It is a general education core curriculum course and / or a service course.

General Education Core Curriculum Objectives/Outcomes: The student is expected to develop the following core objectives established by the THECB.

- **Critical Thinking Skills** – creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. (SLO 1- 4)
- **Communication Skills** – effective development, interpretation and expression of ideas through written and visual communication. (SLO 4- 5)
- **Empirical and Quantitative Skills** – manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLO 1- 2,4)
• **Teamwork** – the ability to consider different points of view and to work effectively with others to support a shared purpose or goal. (SLO 3-5)

**Student Learning Outcomes for Lecture and Lab**: After successful completion of this course students will be able to:

• Demonstrate an understanding of fundamental geologic concepts as it relates to Earth processes and landscape evolution through geologic time.
• Use quantitative reasoning to interpret geologic data (tables, figures, graphs) from primary research, data assimilation and models to assess the differences in competing scientific theories associated with rock formation.
• Demonstrate knowledge on the interdependence of science and technology and the influences geologic reasoning associated with identifiable and testable hypotheses of geologic processes.
• Critically assess the interrelationships between geologic phenomena and communicate the resulting conclusions in oral, visual and written formats.
• Demonstrate an understanding of the skills and attitudes necessary for effective teamwork in collaborative learning activities.

**Course Requirements**: GOL132L (The Earth Through Time Lab) is an introduction to the fascinating and complex processes of planet Earth – an ever-changing dynamic environment. Historical Geology is the evolutional history of geologic processes, and in this course, students will be introduced to the development of continents, ocean basins, mountain chains, volcanoes, earthquakes and many other geologic events. The rock record has also preserved the remains of various life forms, from microscopic invertebrates to large carnivorous reptiles and mammals. This course will introduce some of the various life forms that have evolved over time, their relative success and some of the factors that brought about their demise.

This class is a 1-credit hour lab course and has a weekly co-requisite lecture. Grades from the lecture and lab will be separate.

**Time**: Remember, you are expected to spend the same amount of time on online courses that you would spend for in the classroom for face-to-face courses. That is, expect to spend three hours per week on the lecture portion and three hours per week on the co-requisite laboratory portion. In addition, success in this course would also require additional time spent on the material and studying; reports indicate that two to three additional hours (per credit hour) be spent—independent of whether the class is online or face-to-face. Many of you are choosing to take an online course because of your work schedule, family responsibilities, and scheduling conflicts, so your time is precious. Be aware of the time commitment required by this course and work responsibly.

**Course Topics to be covered:**

**UNIT 1: Fundamentals of Historical Geology**

- The Rock Cycle
- Sedimentology
- Plate Tectonics
- Depositional Environments
- Geologic Time

**UNIT 2: Geologic Time and the Fossil Record**

- Fossilization and Taphonomy
- Major Marine Fossil Groups
- Early Paleozoic Paleontology
- Late Paleozoic Paleontology
- Mesozoic Paleontology

*See the Course Calendar webpage for the dates associated with each topic.*

**Access to Content:** I will provide access to the content on the weekend (Saturday morning, 11 a.m.) prior to when it is listed on the Course Calendar. By no means are you required to begin the content over that the weekend, but some of you have very tight schedules and could benefit from an early start. All lecture exams will be available on Fridays between 11:00 a.m. and Saturday 11:00 a.m. You will be able to receive your score on exams or quizzes immediately, provided there are no answers that need to be individually graded such as fill-in-the-blank or short answer questions. In these cases, time will be needed to review the assessments and make sure questions were asked and graded fairly. Answers to quiz and exam questions will be available once every classmate has submitted their assessment, but that day is *usually* on Monday after assessments are taken. Quizzes, unit, and module content will be available until 11:00 p.m. the day before an exam, but module content **cannot be viewed the day of an exam.** So, plan appropriately!

**Lab Examination Schedule:**

- Lab Exam 1: March 01, 2019
- Lab Exam 2: April 26, 2019

*Please see the Course Calendar webpage for the opening and closing times associated with these exams.*

All lecture exams will include a multiple-choice section with additional sections that will vary between exams but may include any or all of the following sections: 1) multiple choice questions; 2) true / false questions; 3) fill in the blank questions; 4) short answer questions; 5) figure illustration; 6) short essay questions. **All exams will take place online and be delivered via d2l.** The exams will cover questions from lecture modules and assigned activities and outside sources (videos, webpages) referred to in the material. The essay questions are part of the test and I expect you to use complete sentences, correct grammar and spelling.

There are between 20 and 50 questions each on each lab exam, and you will be given 50 minutes to complete the exams. The exams are **not** cumulative, but they are timed and you will not have adequate time to refer back to Unit/Module content. Questions on lecture exams and quizzes are written by the instructor, and the assessment content has been presented in the online content. D2L randomly selects questions from a question bank, and they appear one question at a time. You may not return to any question and change your answer after leaving that page so be sure of your response (study ahead of time!) before answering. It is recommended that you save your responses as you complete each question because of unknown timing of computer or power failure. I cannot help you if questions have not been saved. Once the time allotment for the exam has expired, the exam will be ended and scored.

No outside work or extra credit will be assigned to help improve your grade, so be prepared for the quizzes and exams. It is imperative that you log on and participate in all course material, pay attention to the course calendar, and keep up with the due dates for quizzes, discussions, and exams. In other words – get your money’s worth!

**Dependable internet connection:** Especially when taking quizzes or exams, always rely on a dependable internet connection. I do not recommend taking an assessment via your phone or any public wireless connection (McDonalds, Starbucks, etc.).

**Discussion Board:** The Discussion Board can be used as a place to exchange information between the instructor and classmates. There will be a general "Questions" post where students can ask questions regarding the course content. This is helpful to all, and I will respond to questions as
quickly as possible. I always appreciate questions, and am happy to try to help. Please keep your discourse respectful to all, inappropriate comments will not be tolerated.

Lab Grading Policy:

- Two exams @ 100 points each = 200 points*
- Eleven online quizzes @ 20 points each = 220 points
- Total possible points = 420 points
- Lab grade = your total points / 420, then multiply by 100
- Example: your lecture point total 358 / 420 = 0.85 x 100 = 85

Grade Scale: 90-100 + A, 80-89 + B, 70-79 + C, 60-69 + D, < 60 = F

Academic Integrity (A-9.1): Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty: Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy.

Withheld Grades Semester Grades Policy (A-54): Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

Students with Disabilities: To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to the Office of Disability Services website.

Content and design by: Kevin W. Stafford, PhD - Department of Geology, SFASU
<table>
<thead>
<tr>
<th>Start Date</th>
<th>Lab Module</th>
<th>Assignments</th>
<th>Due Date</th>
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</thead>
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| January 19, 2019  (Week 1) | **Lab Module 1**  
Getting Started / Course Information | **Read through Start Here! Lab Module**  
**Print course calendar** | The Start Here! Lab Module 1 content will remain available throughout course. |
|                 |                             | **E-mail your physical address information to course instructor ASAP to have your lab kit shipped to you.** |                                                                          |
|                 |                             | **Take Course Content Quiz**  
Lab Module 1 Quiz closes January 26, 2019 at 11:00 AM |                                                                          |
| **Unit 1 - Fundamentals of Historical Geology** | | | |
| January 26, 2019 (Week 2) | **Lab Module 2**  
The Rock Cycle: A GOL 131 Review | **Read through Lab Module 2 content and complete associated lab activities** | Lab Module 2 Content will remain available until February 28, 2019 at 11:00 PM |
|                 |                             | **Complete Lab Module 2 Quiz**  
Lab Module 2 Quiz closes February 02, 2019 at 11:00 AM |                                                                          |
| February 02, 2019 (Week 3) | **Lab Module 3**  
Sedimentology: A Review of Sedimentary Rocks | **Read through Lab Module 3 content and complete associated lab activities** | Lab Module 3 Content will remain available until February 28, 2019 at 11:00 PM |
|                 |                             | **Complete Lab Module 3 Quiz**  
Lab Module 3 Quiz closes February 09, 2019 at 11:00 AM |                                                                          |
| February 09, 2019 (Week 4) | **Lab Module 4**  
Plate Tectonics and Earth Structure | **Read through Lab Module 4 content and complete associated lab activities** | Lab Module 4 Content will remain available until February 28, 2019 at 11:00 PM |
|                 |                             | **Complete Lab Module 4 Quiz**  
Lab Module 4 Quiz closes February 16, 2019 at 11:00 AM |                                                                          |
| February 16, 2019 (Week 5) | **Lab Module 5**  
Depositional Environments | **Read through Lab Module 5 content and complete associated lab activities** | Lab Module 5 Content will remain available until February 28, 2019 at 11:00 PM |
|                 |                             | **Complete Lab Module 5 Quiz**  
Lab Module 5 Quiz closes February 23, 2019 at 11:00 AM |                                                                          |
| February 23, 2019 (Week 6) | **Lab Module 6**  
Geologic Time | **Read through Lab Module 6 content and complete associated lab activities** | Lab Module 6 Content will remain available until February 28, 2019 at 11:00 PM |
|                 |                             | **Complete Lab Module 6 Quiz**  
Lab Module 6 Quiz closes March 02, 2019 at 11:00 AM |                                                                          |
| May 10-11, 2019 - Lab Exam 1  (Week 7) | | Review all "Fundamentals of Historical Geology" Lab Modules and materials covered in Unit 2 | Lecture Lab Modules for "Unit 1 - Fundamentals of Historical Geology" closes on February 28, 2019 at 11:00 PM and will not be available for Lab Exam 1 |
|                 |                             | **Lab Exam 1 will on open on March 01, 2019 at 11:00 AM**  
Lab Exam 1 closes on March 02, 2019 at 11:00 AM |                                                                          |
| **Unit 2 - Geologic Time and the Fossil Record** | | | |
| March 09, 2019 (Week 8) | **Lab Module 7**  
Fossilization and Taphonomy | **Read through Lab Module 7 content and complete associated lab activities** | Lab Module 7 Content will remain available until April 25, 2019 at 11:00 PM |
|                 |                             | **Complete Lab Module 7 Quiz**  
Lab Module 7 Quiz closes March 16, 2019 at 11:00 AM |                                                                          |
| March 23, 2019 (Week 9) | **Lab Module 8**  
Major Marine Fossil Groups | **Read through Lab Module 8 content and complete associated lab activities** | Lab Module 8 Content will remain available until April 25, 2019 at 11:00 PM |
|                 |                             | **Complete Lab Module 8 Quiz**  
Lab Module 8 Quiz closes March 30, 2019 at 11:00 AM |                                                                          |
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<thead>
<tr>
<th>Date</th>
<th>Module</th>
<th>Content</th>
<th>Availability</th>
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</thead>
<tbody>
<tr>
<td>March 30, 2019</td>
<td>Lab Module 9</td>
<td>Read through Lab Module 9 content and complete associated lab activities</td>
<td>Lab Module 9 Content will remain available until April 25, 2019 at 11:00 PM</td>
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<tr>
<td></td>
<td>Early Paleozoic Paleontology</td>
<td>Complete Lab Module 9 Quiz</td>
<td>Lab Module 9 Quiz closes April 06, 2019 at 11:00 AM</td>
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<td>April 06, 2019</td>
<td>Lab Module 10</td>
<td>Read through Lab Module 10 content and complete associated lab activities</td>
<td>Lab Module 10 Content will remain available until April 25, 2019 at 11:00 PM</td>
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<td>(Week 11)</td>
<td>Late Paleozoic Paleontology</td>
<td>Complete Lab Module 10 Quiz</td>
<td>Lab Module 10 Quiz closes April 13, 2019 at 11:00 AM</td>
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<tr>
<td>April 13, 2019</td>
<td>Lab Module 11</td>
<td>Read through Lab Module 11 content and complete associated lab activities</td>
<td>Lab Module 11 Content will remain available until April 25, 2019 at 11:00 PM</td>
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<td>(Week 12)</td>
<td>Mesozoic Paleontology</td>
<td>Complete Lab Module 11 Quiz</td>
<td>Lab Module 11 Quiz closes April 20, 2019 at 11:00 AM</td>
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<tr>
<td>April 20, 2019 - Lab Exam 2</td>
<td>(Week 13)</td>
<td>Review all &quot;Geologic Time and the Fossil Record&quot; Lab Modules and materials covered in Unit 2</td>
<td>Lab Modules for &quot;Unit 2 - Geologic Time and the Fossil Record&quot; closes on April 25, 2019 at 11:00 PM and will not be available for Lab Exam 2</td>
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<tr>
<td>Lab Exam 2 will on open on April 26, 2019 at 11:00 AM</td>
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<td>Lab Exam 2 closes on April 27, 2019 at 11:00 AM</td>
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<tr>
<td>April 27, 2019</td>
<td>Lab Module 12</td>
<td>Complete lab kit contents checklist and package lab kit for return shipment</td>
<td>All lab kits must be received by course instructor at Stephen F. Austin State University before May 16, 2019 to receive a grade in this course</td>
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<tr>
<td>(Week 14-16)</td>
<td>Lab Kits Returned</td>
<td>Mail lab kit to course instructor at Stephen F. Austin State University - use Priority or Expedited Shipping to ensure your lab kit is returned promptly</td>
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