CoSM Class Syllabus / Policy

2024 / Spring Semester
GEOL 1001 Laboratory
Fundamentals of Earth Science

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Office Hours: Mon 1 - 2 PM; Tues 11 AM – 2 PM; Wed 1-2 PM; Thurs 11 AM – 12 PM; or by appointment.

Class meeting time and place: Room 302 Miller Science, time varies according to section. Labs will not begin meeting in-person until the second week of school.

Please feel free to contact me or your TA any time to ask questions, discuss any problems you may be having with the material or to help facilitate further understanding.

Course Description:
Fundamentals of Earth Science (GEOL 1001) Two hours lecture, two hours laboratory per week along with weekly lab manual reading assignments and online quizzes. This course is designed as an introduction to the fundamental principles of Earth Science. Topics include the earth’s structure and surface landforms; mineral and energy resources; geologic hazards such as volcanoes, earthquakes and landslides; water resources; and the unifying theory of plate tectonics. No prerequisites.

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.

Student Learning Outcomes for Lecture and Lab:
After successful completion of this course students will be able to:
SLO 1. Demonstrate an understanding of fundamental geologic concepts as it relates to Earth processes and landscape evolution through geologic time. (Critical Thinking, Empirical and Quantitative Skills)
SLO 2. 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. (Critical Thinking, Empirical and Quantitative Skills)
SLO 3. Demonstrate knowledge on the interdependence of science and technology and the influences geologic reasoning associated with identifiable and testable hypotheses of geologic processes. (Critical Thinking, Teamwork)
SLO 4. Critically assess the interrelationships between geologic phenomena and communicate the resulting conclusions in oral, visual and written formats. (Critical Thinking, Communication, Empirical and Quantitative Skills, Teamwork)
SLO 5. Demonstrate an understanding of the skills and attitudes necessary for effective teamwork in collaborative learning activities. (Communication, Teamwork)
General Education Core Curriculum
The Texas Higher Education Coordinating Board has identified six core learning objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives.

By enrolling in GEOL 1001 you are also enrolling in a Core Curriculum Course that fulfills the Physical and Life Sciences Core Curriculum requirement. The chart below indicates: (a) The core objectives that are required to be taught in this course per the Texas Higher Education Coordinating Board (THECB), (b) How the required core objectives will be addressed.

Core Curriculum Objective Table

<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>How the Core Objective Will be Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking Skills</td>
<td>To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information</td>
<td>Identification and evaluation of unknown rock and mineral samples through pre-defined methods; analysis of trends and projection of future events concerning climate and resource usage</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>To include effective development, interpretation and expression of ideas though written, oral, and visual communication</td>
<td>Interpretation of seismic data and communicating the risks of earthquakes</td>
</tr>
<tr>
<td>Empirical and Quantitative Skills</td>
<td>To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.</td>
<td>Interpretation of resource usage data and impact on society; analysis of topographic map data;</td>
</tr>
<tr>
<td>Teamwork</td>
<td>To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal</td>
<td>Group identification of unknown rock and mineral samples, analysis of topographic maps</td>
</tr>
</tbody>
</table>

Text and Materials:
Fundamentals of Earth Science Laboratory Manual (available in all SFA bookstores)

The lab manual is required and will be needed the first day of lab activities, the week of January 22nd.

A new lab manual must be purchased from the bookstores. Each new lab manual contains perforated quiz pages that will be turned in to get credit for the weekly in-class lab quizzes.
Quizzes must be completed in pencil, no pens are allowed in the labs. Quizzes or exams completed in pen will not be counted as a grade.

Course Requirements:
This class is a 3-credit hour course and has a weekly requisite lab where students will gain experience with earth materials, gathering and analyzing data, communicating their findings and working as a team to explain scientific processes. Grades from the lecture and lab will be averaged, with the lab counting 1/3 of the grade. You will receive one grade for the entire course, assigned by your lecture instructor.

Attendance Policy:
Attendance is mandatory for understanding the material and participating in class. Opportunities for make-up exercises/exams must be approved by the Laboratory Coordinator. The following constitutes an excused absence:

- Illness: note from doctor for day of the lab.
- Death in Family: must be documented by obituary clipping from newspaper or funeral home.
- Jury Duty: must be documented by note from judge or other court official.
- School Function: name must appear in Faculty Bulletin or note must be sent from instructor, coach, etc.

For excused absences, makeup material time and date should be discussed with the lab coordinator. For materials missed without an excused absence, only online quizzes can be made up and materials must be made up within two weeks of the original due date. For all missed material, contact the lab coordinator.

You are expected to come to lab, to be on time, and to stay for the duration of the lab. Whenever it is possible, arrangements should be made BEFORE the lab time so that provisions can be made.

If you become ill or have a restroom emergency during the lab period, please excuse yourself quietly. If you need to study for another class or read the paper, the library is available. If you need to nap, that is best done at home – not in the classroom. If you are sleeping or reading other material, you cannot be participating and I will assume you to be absent in mind and spirit, if not in body, for the day. Use your time wisely and learn how to plan ahead.

Testing Policy:
For the in-class quizzes and exams, the use of electronic devices is prohibited and students are to complete these independently. During exams, cell phones should be silenced and put in the student’s bag, backpack, etc. which should be put at the front of the classroom. While in-class quizzes are open book and allow the use of the lab manual, the in-class midterm and final exam are not open book. Students using electronic devices, unauthorized material, or students found working together will be considered in violation of SFA’s Academic Integrity Policy and will be reported to the office of the Dean of Students.

Seating Assignments:
Although seating in the lab will not be assigned to students on the first day, a seating chart for each lab section will be created. If a student wishes to change their assigned seat, they must notify the instructor so that the seating chart may be updated. Students are responsible for the table space at their assigned seat. If a student is found to have vandalized university property, the student will be subject to appropriate disciplinary action as found in the Code of Student Conduct and Academic Integrity Handbook.
Laboratory Exercises:
Weekly laboratory exercises will reinforce lecture material with practical exercises designed to enhance specific General Education Core Curriculum Objectives. Each week, students will be introduced to these core objectives in the form of classroom exercises and electronic assignments delivered through the SFA platform Desire2Learn (d2l). Students will be responsible for accessing and completing pertinent materials from d2l.

Each week, the student will be responsible for:

1. Required reading of the upcoming chapter in the lab book to help prepare for the laboratory exercises.
2. A weekly requisite electronic pre-quiz administered through d2l before the laboratory meeting to ensure the student is prepared for the laboratory exercises.
3. Laboratory exercises completed in class. During the laboratory exercises, students will work individually and in teams to complete the in-class assignments.
4. A weekly in-class quiz to test comprehension of the laboratory exercises.
5. A weekly requisite electronic post-quiz administered through d2l after the laboratory meeting to ensure retention of the material.

The electronic quizzes will help to prepare you for the lab exercises assigned the following week and reinforce the material covered in the laboratory exercises. The pre-quizzes will cover selected reading material assigned, the post-quizzes will help students synthesize the material and retain the information. All quizzes, both electronic and in-class, should be taken individually. The electronic quizzes will open on Friday at 12:00 a.m. and remain available until Monday at 12 midnight of the following week.

Grading Policy
Your laboratory grade will consist of the following:

- Weekly laboratory exercises (11 exercises @ 10 points each) 110
- Weekly electronic pre-quizzes (11 quizzes @ 5 points each) 55
- Weekly electronic post-quizzes (9 quizzes @ 5 points each) 45
- Online exams (Midterm and Final Exam, 25 points each) 50
- In-class exams (Midterm and Final Exam, 100 points each) 200

Total Points 460

Grades for laboratory classroom activities, exams, and electronic assignments will be delivered through d2l.

You will not receive a separate grade for your lab performance. Your laboratory average will be sent to your lecture instructor and your final grade for the course will be assigned by your lecture instructor. Lab grades will be posted using Desire2Learn (d2l), which can be accessed through https://d2l.sfasu.edu. You may log in using your mySFA username and password.

Academic Integrity

The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.
Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

**Withheld Grades Semester Grades Policy (5.5)**
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 coursework 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 to compute the grade point average. For additional information, go to [https://www.sfasu.edu/policies/course-grades-5.5.pdf](https://www.sfasu.edu/policies/course-grades-5.5.pdf).

**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 promptly may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Student Wellness and Well-Being**
SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and
their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

**On-campus Resources:**

**The Dean of Students Office** (Rusk Building, 3rd floor lobby)  
[www.sfasu.edu/deanofstudents](http://www.sfasu.edu/deanofstudents)  
936.468.7249  
dos@sfasu.edu

**SFA Human Services Counseling Clinic** Human Services, Room 202  
[www.sfasu.edu/humanservices/139.asp](http://www.sfasu.edu/humanservices/139.asp)  
936.468.1041

**The Health and Wellness Hub** “The Hub”  
Location: corner of E. College and Raguet St.

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

[www.sfasu.edu/thehub](http://www.sfasu.edu/thehub)  
936.468.4008  
thehub@sfasu.edu

**Crisis Resources:**

- Burke 24-hour crisis line: 1.800.392.8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)
- johCrisis Text Line: Text HELLO to 741-741
<table>
<thead>
<tr>
<th>Week Dates</th>
<th>Chapter/Module</th>
<th>Assignments (all times are CST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 1/18 - 1/19</td>
<td>Getting Started Pre-Lab Material</td>
<td>Read Syllabus Pre-Quiz 1 and Lab Orientation Quiz Opens 1/18</td>
</tr>
<tr>
<td>Week 2 1/22 - 1/26</td>
<td>Chapter 1: Introduction to Minerals</td>
<td>Pre-Quiz 1 and Lab Orientation Quiz Due 1/22 @ 11:59 PM In-Class Quiz 1 due at end of lab Post-Quiz 1 and Pre-Quiz 2 Opens 1/26</td>
</tr>
<tr>
<td>Week 3 1/29 - 2/2</td>
<td>Chapter 2: Sediment and Erosion</td>
<td>Post-Quiz 1 and Pre-Quiz 2 Due 1/29 @ 11:59 PM In-Class Quiz 2 due at end of lab Post-Quiz 2 and Pre-Quiz 3 Opens 2/2</td>
</tr>
<tr>
<td>Week 4 2/5 - 2/9</td>
<td>Chapter 3: Sedimentary Rocks</td>
<td>Post-Quiz 2 and Pre-Quiz 3 Due 2/5 @ 11:59 PM In-Class Quiz 3 due at end of lab Post-Quiz 3 and Pre-Quiz 4 Opens 2/9</td>
</tr>
<tr>
<td>Week 5 2/12 - 2/16</td>
<td>Chapter 4: Igneous Rocks</td>
<td>Post-Quiz 3 and Pre-Quiz 4 Due 2/12 @ 11:59 PM In-Class Quiz 4 due at end of lab Post-Quiz 4 and Pre-Quiz 5 Opens 2/16</td>
</tr>
<tr>
<td>Week 6 2/19 - 2/23</td>
<td>Chapter 5: Metamorphic Rocks</td>
<td>Post-Quiz 4 and Pre-Quiz 5 Due 2/19 @ 11:59 PM In-Class Quiz 5 due at end of lab Online Midterm Exam Opens 2/23</td>
</tr>
</tbody>
</table>
| Week 7     | Midterm Exam | Online Midterm Exam Due 2/26 @ 11:59 PM  
|           |              | In-Class Midterm during the lab period  
|           |              | Pre-Quiz 6 Opens 3/1  |
| 2/26 - 3/1|              | Unit 2: Earth in Society  |

| Week 8     | Chapter 6: Earthquakes and Seismology | Pre-Quiz 6 Due 3/4 @ 11:59 PM  
|           |                                          | In-Class Quiz 6 due at end of lab  
| 3/4 - 3/8  |                                          | Post-Quiz 6 and Pre-Quiz 7 Opens 3/8  |

| Week 9     | Spring Break - No Labs                  |  |
| 3/11 - 3/15|                                          |  |

| Week 10    | Chapter 7: Powering our Planet; Fossil Fuels | Post-Quiz 6 and Pre-Quiz 7 Due 3/18 @ 11:59 PM  
|           |                                              | In-Class Quiz 7 due at end of lab  
| 3/18 - 3/22|                                              | Post-Quiz 7 and Pre-Quiz 8 Opens 3/22  |

| Week 11    | Easter Break - No Labs                     |  |
| 3/25 - 3/29|                                          |  |

| Week 12    | Chapter 8: Rock and Mineral Resources      | Post-Quiz 7 and Pre-Quiz 8 Due 4/1 @ 11:59 PM  
|           |                                              | In-Class Quiz 8 due at end of lab  
| 4/1 - 4/5  |                                              | Post-Quiz 8 and Pre-Quiz 9 Opens 4/5  |

| Week 13    | Chapter 9: Streams and Rivers; Hydroelectric Power | Post-Quiz 8 and Pre-Quiz 9 Due 4/8 @ 11:59 PM  
|           |                                                    | In-Class Quiz 9 due at end of lab  
| 4/8 - 4/12 |                                                    | Post-Quiz 9 and Pre-Quiz 10 Opens 4/12  |
| Week 14  
4/15 - 4/19 | Chapter 10: Groundwater; Geothermal Energy | Post-Quiz 9 and Pre-Quiz 10 Due 4/15 @ 11:59 PM  
In-Class Quiz 10 due at end of lab  
Post-Quiz 10 and Pre-Quiz 11 Opens 4/19 |
|----------------|-------------------------------------------|-----------------------------------------------------------------|
| Week 15  
4/22 - 4/26 | Chapter 11: Alternative Energy | Post-Quiz 10 and Pre-Quiz 11 Due 4/22 @ 11:59 PM  
In-Class Quiz 11 due at end of lab  
Online Final Exam Opens 4/26 |
| Week 16  
4/29 - 5/3 | Final Exam Week | Online Final Exam Due 4/29 @ 11:59 PM  
In-Class Final Exam during the lab period |

Schedule is subject to change**