Course Description
Designed for the student with no geology background. Introduction to the study of minerals, rocks and the processes that modify and shape the surface features of the Earth. Focus on energy, mineral and water resources; volcanism; and other practical aspects of geology. No prerequisites Three hours of lecture, plus two hours of laboratory per week (enrolled separately).
Co-requisite: GOL 131L (Note: you do need your lab book for the first day of lab).

Text and Materials
The Changing Earth: Exploring Geology and Evolution (6th or 7th Ed.; variations primarily exist in the “Geofocus” and “Geoimpact” excerpts throughout the text), Monroe et al. ISBN: 9781285733418. 736 p. (required)

Course Requirements
Introductory Geology is an introduction to the study of the earth, including its natural resources, structure, and natural processes. Students will learn the impacts of geology on society such as earthquakes and volcanoes, and vice versa (anthropogenic effects), and touch on major theories in earth science such as plate tectonics. This course will have four exams (three 50-minute exams, plus a comprehensive final), and a weekly quiz over material covering the previous week (Monday’s at 10:00 am). There is a co-requisite weekly lab which will provide hands-on experiences in earth science. You are expected to have read the material for the week outlined below, which will facilitate in content retention and aid in classroom discussions. I may also provide some supplemental material throughout the semester that is expected to be read before the designated class. These will consist of short pieces, typically news articles or scientific summaries that focus on a geologically related topic that affects society.

Each exam will be primarily multiple choice, with potentially a few short answer questions, and will cover the material from the previous exam (or start of classes for exam 1) through the date of the exam. The final exam will be comprehensive, covering all material from the semester. Cell phones, laptops, tablets, etc. are not permitted during an exam. Calculators may be useful during some of the exams. Your cellphone cannot be used as a calculator.

Quizzes will only include material covered from the previous week and/or from the assigned chapters covered. This is to promote class attendance. There is no makeup for missed quizzes, or if you are more than 10 minutes late to class, although the lowest quiz grade will be dropped. This allows for a missed class or tardiness.

There are several resources for help on campus, such as tutoring in the AARC, along with your TA’s in the lab can answer questions, and I am almost always available (and most definitely willing) to help. I have set office hours (MW 2-4 pm; TR 9-10 am), but can also be available by appointment, and email (note I most likely won’t answer an email after 10 pm or so). We are here to help you succeed, while also helping you learn a bit about the world you inhabit. The AARC is free, and will have Geology hours setup soon! GO VISIT THEM!
Please limit food in the classroom, phone calls (silence phones), texting, and other distracting behaviors. If you need to leave, please do so quietly. If you know you need to leave class early, please sit near the edge of the row and excuse yourself quietly.

**Grading Policy**

Your quiz score will be out of 100, and your lowest quiz dropped (so you can miss one quiz due to being late or absent). Your overall quiz score throughout the semester will take the place of one of the four exams. If you are satisfied with your grade by the end of the semester, you do not need to take the final. Please, let me know if you are not taking the final before the date of the final. Typically, if you do well on the quizzes, you should do well on the comprehensive final, and the exams along the way.

<table>
<thead>
<tr>
<th>Quiz/Exam</th>
<th>Total Points</th>
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<tbody>
<tr>
<td>Quizzes (~10 total)</td>
<td>100 points</td>
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<tr>
<td>Each exam</td>
<td>300 points</td>
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</tbody>
</table>

Total (lecture)  

\[
\text{your total points/400 points} \times 100 = \text{class%}
\]

- **100-90%** A  
- **89-80%** B  
- **79-70%** C  
- **69-60%** D  
- **59-0%** F

You will receive a separate lab grade given by your lab instructor.

**Course Calendar**

Topics try to coincide with the laboratory topics covered, up until the last third of the semester. We will try to stay on scheduled topic, although exam dates will be firm. Topics are subject to change.

<table>
<thead>
<tr>
<th>Week (date)</th>
<th>Chapter Covered</th>
<th>Topic</th>
<th>Important Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 27-wk 1</td>
<td>Chapter 1, 3</td>
<td>Introduction to Geology</td>
<td>Aug 30-last day to register</td>
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<tr>
<td></td>
<td>Chapter 3</td>
<td>Minerals</td>
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<tr>
<td>Sept 3-wk 2</td>
<td>Chapter 3, 4</td>
<td>Igneous Rocks and Volcanoes</td>
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<tr>
<td>Sept 10-wk 3</td>
<td>Chapters 4,5, 6</td>
<td>Igneous Rocks and Volcanoes</td>
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<td></td>
<td>Chapter 6</td>
<td>Sediments and Erosion</td>
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<tr>
<td>Sept 17-wk 4</td>
<td>Chapter 6, 7</td>
<td>Sediments and Sedimentary Rocks</td>
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<tr>
<td>Sept 24-wk 5</td>
<td>Chapter 7</td>
<td>Sediment and Sedimentary Rocks</td>
<td>Exam 1 Fri. Sept 28</td>
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<tr>
<td>Oct 1-wk 6</td>
<td>Chapter 8, 2, 9</td>
<td>Metamorphic Rocks, Plate tectonics, Earthquakes and Seismology</td>
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<tr>
<td>Oct 8-wk 7</td>
<td>Chapter 2, 9</td>
<td>Plate tectonics, Earthquakes and Seismology</td>
<td></td>
</tr>
<tr>
<td>Oct 15-wk 8</td>
<td>Chapter 10</td>
<td>Deformation, Mountain Building, and Earth’s Crust</td>
<td>Exam 2 Fri. Oct 19</td>
</tr>
<tr>
<td>Oct 22-wk 9</td>
<td>Chapter 12</td>
<td>Running Water – Streams and Rivers</td>
<td>Oct 24-last day to drop</td>
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<td>Oct 29-wk 10</td>
<td>Chapter 13</td>
<td>Groundwater</td>
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<tr>
<td>Nov 5-wk 11</td>
<td>Chapter 14</td>
<td>Glaciers and Glaciation</td>
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<tr>
<td>Nov 12-wk 12</td>
<td>Chapter 15</td>
<td>Wind and Deserts</td>
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Attendance Policy
Attendance is mandatory, and necessary in order to succeed in class. While I will not take roll during class, the weekly Monday quizzes will be a good indicator of who is in class, and who is not. Weekly quizzes cannot be made up and will also be missed if more than 10 minutes late, or if the rest of the class is finished with their quiz by the time you arrive late. The quizzes are short, and should be completed within 5-10 minutes.

To make-up an exam, only excused absences will be accepted (doctor’s note, sporting event, etc., with proper documentation). We will arrange a time and place for the make-up exam, which will be a different exam than the one given in class.

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

Student Learning Outcomes
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.
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.
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.
SLO 4. Critically assess the interrelationships between geologic phenomena and communicate the resulting conclusions in oral, visual and written formats.
SLO 5. Demonstrate an understanding of the skills and attitudes necessary for effective teamwork in collaborative learning activities.

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 Fundamentals of Earth Science you are also enrolling in a Core Curriculum Course that fulfills the Natural Sciences requirement. You will see this course on your D2L list.

The student is expected to develop the following core objectives established by the THECB.
CO 1. Critical Thinking Skills – creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. (SLO 1-4)
CO 2. Communication Skills – effective development, interpretation and expression of ideas through written, oral and visual communication.
(SLO 4-5) CO 3. Empirical and Quantitative Skills – manipulation and analysis of numerical data or observable facts resulting in informed conclusions. (SLO 1-2,4)
CO 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)
**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 at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

**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.

**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 [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).