GEOL 1303.502 Course Syllabus – Summer I 2021
Introductory Geology

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Office Hours: As this is a web-based course, office hours will be offered electronically.

Course Description

4 semester hours. 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.

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 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 1303 Introduction to Physical Geology, you are also enrolling in a Core Curriculum Course that seeks to develop the following core objectives established by the THECB:

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

Student Learning Outcomes

1. Understand minerals and their physical properties.
2. Gain an understanding of rocks, their physical properties, and how they form.
3. Study the external forces at the Earth’s surface and how those forces modify and shape the Earth’s surface.
4. Study the morphological features that external forces produce on the Earth’s surface.
Time

Remember, you are expected to spend the same amount of time on online courses that you would spend for F2F (face to face) courses. That is, expect to spend three hours per day on the lecture portion and two hours per day on the laboratory portion. In addition, reports for success indicate that two to three additional hours (per credit hour) be spent -- independent of whether the class is online or F2F. Many of you are working, have families, or taking other classes, so your time is limited. I have experienced the same, so I understand your position.

Course Calendar

Dates may change at the discretion of the instructor. Should a date change be required, it will be announced on the course homepage or on the discussion board. Print the Semester Calendar and check it frequently to review daily/weekly assignments and to avoid missing deadlines.

<table>
<thead>
<tr>
<th>Week</th>
<th>Module</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>May 17 – 18</td>
<td>Get Started</td>
<td>• Read syllabus, semester calendar, and week's content</td>
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<td>• Take Get Started Quiz and Cheating &amp; Plagiarism Quiz by May 18 at midnight. Note: These assessments will not count toward your final grade.</td>
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<td>• GEOL 1103 Laboratory Get Started information is available and should be reviewed</td>
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<td>May 19</td>
<td>Unit 1, Module 1: Introduction to Geology</td>
<td>• Read week's content</td>
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<td>• Complete Student Introduction by May 19, 11:59 PM (CST)</td>
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<td>May 20</td>
<td>Unit 1, Module 2: Atomic Review</td>
<td>• Read week's content</td>
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<td>• Complete Quiz 1 (Unit 1, Module 2) by May 20, 11:59 PM (CST)</td>
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<tr>
<td>May 24</td>
<td>Unit 1, Module 3: Mineral Physical Properties</td>
<td>• Read week's content</td>
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<td>• Discussion 2: Texas Minerals due by May 24, 11:59 PM (CST)</td>
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<tr>
<td>Date</td>
<td>Unit/Module</td>
<td>Tasks</td>
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| May 25     | Unit 1, Module 4: Mineral Compositional Groups | • Read week's content  
• Complete Quiz 2 (over Unit 1, Module 4) by May 25, 11:59 PM (CST) |
| May 26 – May 27 | Unit 1 Review                      | • Review Unit 1 lecture material                                    |
| June 1     | Exam 1                               | • Complete Lecture Exam 1 on June 1 (available until 11:59 PM)        |

**Unit 2: Rocks**

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<tr>
<th>Date</th>
<th>Unit/Module</th>
<th>Tasks</th>
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| June 2     | Unit 2, Module 1: Igneous Rocks      | • Read week's content  
• Discussion 3: East Texas Earthquakes due by June 2, 11:59 PM (CST) |
| June 3     | Unit 2, Module 2: Weathering         | • Read week's content  
• Complete Quiz 3 (Unit 2, Module 2) by June 3, 11:59 PM (CST)       |
| June 7     | Unit 2, Module 3: Sedimentary Rocks  | • Read week's content  
• Discussion 4: Black Gold, Texas Tea due by June 7, 11:59 PM (CST) |
| June 8     | Unit 2, Module 4: Metamorphic Rocks  | • Read week's content  
• Complete Quiz 4 (Unit 2, Module 4) by June 8, 11:59 PM (CST)       |
| June 9 – June 10 | Unit 2 Review                  | • Review Unit 2 lecture material                                    |
| June 14    | Exam 2                               | • Complete Lecture Exam 2 on June 14 (available until 11:59 PM)        |

**Unit 3: Exogenous Forces**

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<tr>
<th>Date</th>
<th>Unit/Module</th>
<th>Tasks</th>
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| June 15    | Unit 3, Module 1: Gravity and Aridity| • Read week's content  
• Complete Quiz 5 (Unit 3, Module 1) by June 15, 11:59 PM (CST)       |
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<tr>
<th>Date</th>
<th>Module/Activity</th>
<th>Tasks</th>
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<tr>
<td>June 16</td>
<td>Unit 3, Module 2: Rivers</td>
<td>- Read week’s content</td>
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<td>- Complete Quiz 6 (Unit 3, Module 2) by June 16, 11:59 PM (CST)</td>
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<td>June 17</td>
<td>Unit 3, Module 3: Groundwater</td>
<td>- Read week’s content</td>
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<td>- Discussion 5: Water, Water Everywhere due by June 17, 11:59 PM (CST)</td>
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<td>June 21</td>
<td>Unit 3, Module 4: Glaciation &amp; Shorelines</td>
<td>- Read week’s content</td>
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<td>- No lecture assignments for Module 4 (yay!)</td>
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<td>June 22 – 24</td>
<td>Unit 3 Review</td>
<td>- Field Project due by June 22 at 11:59 PM (CST)</td>
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<td>- Complete End-of-Semester Survey by June 22 at 11:59 PM (CST) (Other Resources in Navigation Bar, Surveys)</td>
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<tr>
<td>June 25</td>
<td>Exam 3</td>
<td>- Complete Lecture Exam 3 on June 25 (available until 11:59 PM)</td>
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**Text & Materials**

*Optional*: No textbook is required, but I recommend that you purchase Stephen Marshak’s *Essentials of Geology* if your learning style benefits from having a textbook for reference.

**Grading and Evaluation**

Grades are determined from a variety of assignments:

- Examinations: 3 @ 100 points (300 points total)
- Quizzes: 5 highest out of 6 given @ 20 points (100 points total)
- Discussions: 5 @ 5 points (25 points total)

*Total = 425 pts*
Grading follows the scheme below:

A = 381-425 (≥ 90%)
B = 338-380 (80-89%)
C = 297-337 (70-79%)
D = 253-296 (60-69%)
F = < 253 (< 60%)

Laboratory Grade:
The laboratory is a separate 1-hour credit, and lecture is a separate 3-hour credit. However, they are co-requisites (meaning the initial attempt requires simultaneous enrollment). You must pass both (> 60 average) to receive credit for a laboratory science. For example, if you have an 85 average in lecture, you would receive a B for completion of the 3-hour lecture portion. However, if you have a 55 average in lab, you would receive a F for non-completion of the required 1-hour lab. University requirements are that both (lab and lecture) be successfully completed. Check the requirements of your College to determine if you should repeat only the portion that was failed or both portions (lab and lecture).

You must take the Get Started Quiz and Cheating & Plagiarism Quiz in the lecture content and the Get Started Quiz in the lab content by May 18 at midnight. These assessments do not count toward your average grade, but you will be unable to advance in either until you complete them.

On the weeks indicated on the Semester Calendar, a quiz is designed to test your knowledge of Module content. Quizzes typically contain ten objective questions and have a brief duration. As with the examinations, time limit is strictly enforced with a penalty of five points per extra minute taken. These quizzes can be completed in the time allotment if you are prepared, and you can view the correct quiz answers after completion.

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 unstable wireless connection (McDonalds, Starbucks, etc.).

Exams

These exams will consist of objective questions on the material covered in Units 1, 2, and 3 (respectively). There are 50 questions each on Exams 1 & 2, and you will be given 60 minutes to complete each exam. There are 100 questions on Exam 3, and you will be given 120 minutes to complete the exam. The exams are not cumulative, but they are timed. The penalty for taking more time than allotted is five points per minute, so be prepared when you begin the assessment. You will not have adequate time to refer back to Unit/Module content. Questions on lecture and lab quizzes/exams 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. However, you may return to any question and change your response within the prescribed time allotment. 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.
Laboratory Rock & Mineral Kit

Every student enrolled in this online course is required to purchase a LabPaq kit from HOL (Hands-On Labs). These kits are used to study physical properties of minerals/rocks and to aid in their identification; they are required for mineral/rock assessments.

Discussion Board

The Discussion Board (Course Tools in Navigation Bar) can be used as a place to exchange information amongst classmates. Please keep your comments on a professional level, and I will try to respond quickly when a question is asked. If I miss your question in Discussions, email and give me a gentle reminder.

Field Project - For extra credit in lab OR lecture (15 points added; due June 22 at midnight)

You’ll learn in this course that geology surrounds us. The purpose of the Field Project is:

1) To help you become more aware of the uses of various rocks and

2) To help you learn to accurately identify those rocks.

This project has several components:

First, you must locate and identify 10 different rocks in your surroundings. The samples you identify must have:

- Formed naturally in the Earth (i.e. you cannot claim concrete or man-made products as samples)
- Been refined (see explanation below) but still be identifiable by physical properties (that is, you cannot take a photo of a piece of drywall and count it as gypsum because you cannot identify gypsum by looking at a piece of drywall)
  - A refined rock sample would be ornamental stone sculptures, tombstones, countertops, walls, building stones, etc. in use today. Samples sold at Lowe’s, Earth ’N’ Stone, Kiva Floors, Home Depot, etc. are not acceptable for this project.
- Please DO NOT submit photos of:
  - chalk used on a blackboard (b/c most of it is a mixture of clay)
  - chalkboards (blackboards) (b/c most are synthetic)
  - rocks in the rock garden outside Miller Science
  - gravel-sized fragments (along train tracks, trail you walked along, or from your yard)
  - samples from the lab kit or from a personal collection
  - minerals because the field project is focused on rock identification

The purpose of this field project is to look around your surroundings and notice how many rocks have been used in a refined sort of way and how easy they are to identify by using the physical properties that you have learned in lab.
For each sample:

- Take **two** photos (see below) of the sample and include a personal object in every photo
  - Personal object should not be a penny, ruler, or rock hammer. Instead, use something small and unique like a keychain, ring, toy, etc.
  - Personal object **should not** include confidential information (social security card, driver’s license number, personal address, etc.)
    - *purpose of including a personal object is to prevent photos from being downloaded from an internet site*

- **Two** photos:
  - One view **zoomed out** that displays the refined structure (tombstone, statute, etc.)
  - One view **zoomed in** so that I can observe physical properties and identify the sample

- Photos should be focused (does not require the purchase of a quality camera)
- Identify the sample and describe physical properties in photo that you used to identify
  - *i.e., not generic like mineral composition, texture, etc. that could be used for a variety of rocks*

- Give location of sample (be as specific as possible!) so that it could be re-traced (include name of city and location where it was found, but do not include confidential information). However, you should be more specific than saying "in the creek behind my house in Dallas, Texas" or "along the railroad tracks in Nacogdoches, Texas."
- Only one example of each rock may be used. That is, if you identify granite used for a countertop for one of your samples, don’t use granite on a tombstone as another sample.
- Cannot use variations of one rock for multiple samples. That is, don’t count red granite and grey granite as separate samples.

A word to the wise… You may want to begin this assignment early, but you will not learn all of the rocks and their physical properties until around mid-semester. You should be able to find 7-8 rock samples quickly, but the last 2 or 3 may take more time. However, 10 different rock types can be found on the SFASU campus, so this project is not impossible nor does it require a visit to campus. Refined rocks are everywhere! This project does not take exorbitant amounts of time, but don’t expect to complete it the day before it is due.

You may submit your project using **any** format (e.g., Word doc, pdf, PowerPoint)

Submit your project in the Dropbox provided. A few projects might be so large that they need to be submitted in parts, but 99% of them are not that large. **If you wish to obtain the extra credit points for the lecture section, submit the project to the lecture section dropbox. If you wish to obtain the points for the lab section, submit the project to the lab section dropbox.**

**Access to Content**

I give access to the week's content on that morning (12:01 a.m.) prior to when it is listed on the Course Calendar. You are given your score on assessments immediately upon submission provided there are no Fill-In-The-Blank or Short Discussion questions. Time is 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* the day after assessments are taken. If you have issues accessing the exams or need to reschedule, please contact me ASAP.
**Final Exam Exemption**

If your final semester average is \( > 93 \), you will be exempt from a final exam. **NOTE**: You might be exempt from the lecture final exam and not the lab final exam (or vice versa). You must complete all of the assessments (in lecture and in lab - except for the optional Field Project) to be exempt. Check with the instructor before assuming exam exemption.

**University Policies**

**Academic Integrity** - 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/).
Mental Health Resources

SFASU values students’ mental health and the role it plays in academic and overall student success. 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:
SFASU Counseling Services
www.sfasu.edu/counselingservices
3rd Floor Rusk Building
936-468-2401

SFASU Human Services Counseling Clinic
www.sfasu.edu/humanservices/139.asp
Human Services Room 202
936-468-1041

Crisis Resources:
Burke 24-hour crisis line 1(800) 392-8343
Suicide Prevention Lifeline 1(800) 273-TALK (8255)
Crisis Text Line: Text HELLO to 741-741