Instructor: Dr. Mike Read  
Email: michael.read@sfasu.edu  
Phone: 936-468-2095  
Office: Room 303, Miller Science Building  
Office Hours: As this is a web-based course, office hours will be offered electronically.

Laboratory Kit

Every student enrolled in this online course is required to purchase a laboratory kit from HOL (Hands-On Labs). These kits will be used daily for mineral and rock content and quizzes and for lab practical exams. They will aid in learning the physical properties of minerals and rocks and in their identification.

Program Learning Outcomes:
1. Demonstrate knowledge of the fundamental core geologic concepts (Mineralogy, Petrology, Structural Geology, Stratigraphy, Geophysics and Geochemistry). (Concepts)
2. Execute geologic procedures and methods accurately, appropriately and efficiently. (Skills)
3. Apply principles of logic and reasoning to develop and analyze geologic problems. (Logical Reasoning)
4. Demonstrate competence in using various geologic tools, including technology, to formulate, represent, and solve problems. (Critical thinking - Problem Solving)
5. Demonstrate proficiency in communicating geologic information in an appropriate form to the expected audience. (Communication)

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 1103 Intro Geology Lab, 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 and how they form.
3. Study the morphological features that external forces form on the Earth’s surface.
Text & Materials

No lab manual is required because there are no lab assignments (other than Worksheets), but the manuals listed below are excellent (any edition). Many Laboratory Manuals for Intro/Physical Geology are offered for purchase online, and any of them could be beneficial. However, purchase of a lab manual is optional and not a requirement because this course provides pertinent information. You will have an opportunity to interact and exchange (mineral identification /rock identification/topographic map) information with your classmates.

Grading & Evaluation

Grades are determined from a variety of assignments:

- Examinations: 3 @100 points (300 points total)
- Quizzes: 10 highest out of 11 given @10 points (100 points total)
- Worksheets: 5 highest out of 6 given @10 points (50 points total)
- Field Project: *Optional* 1 @15 points (15 points total)

**TOTAL = 450 pts**

Grading follows the scheme below:

A = 405-450
B = 360-404
C = 315-359
D = 270-314
F = < 269

It is your responsibility to keep up with your grades, and they can always be viewed (*Grades in Navigation bar*). The Field Project is optional and only used as extra credit in lab or lecture (not both). Thus, you are not penalized if you elect not to submit it. Guidelines for this project are listed later in the syllabus.

The laboratory is a separate 1-hour credit, and lecture is a separate 3-hour credit. However, they are corequisites (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 the grade "B" for completion of the 3-hour lecture portion. However, if you have a 55 average in lab, you would receive the grade "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).

If you want to determine your lab average at any point in the semester or your final lab average, follow these instructions:

- **Current** lab average:
  - Get Started Quiz is not included.
  - add completed quiz grade(s), worksheet grade(s), and exam grade(s)
  - divide by number completed; for example:
    - if 3 quizzes (@10 pts), 1 worksheet (@10 pts), and 1 exam (@100 pts)
- TOTAL = 140 points
  - divide by 1.4
  - if 7 quizzes (@10 pts), 2 worksheets (@10 pts) s, and 2 exams (@100 pts)
    - TOTAL = 290 points
    - divide by 2.9
  - etc.

- **Final** lab average:
  - Get Started Quiz is *not* included in final grade.
  - add 10 highest quiz grades, 5 highest worksheet grades, 3 exam grades, and *optional* Field Project grade
  - TOTAL = 450 points
    - Divide by 4.5

**Access to Content**

I give access to the content when it is listed on the Semester Calendar. Answers to quiz and exam questions will be available once every classmate has submitted their assessment, but that day is *usually* two days after assessments are taken.

*In lab*, Get Started information can be accessed immediately, but course content in lab cannot be accessed until the second day of classes.

**Exams**

The exams will be given on the dates listed on the Semester Calendar and will consist of objective questions on the material covered in Units 1, 2, and 3 (respectively). They are not cumulative, and they will be timed. The time limit will be strictly enforced with a penalty of five points per extra minute taken.

**Quizzes**

You must take the **Get Started Quiz** by **May 19 at 11:59 PM**. This assessment will *not* count toward your final grade, but you will be unable to advance in the course (open Content or take assessments) until you complete this quiz.

On the days indicated on the **Semester Calendar**, there will be a quiz designed to test your knowledge of the content covered in the unit to that point.

The quizzes typically contain ten objective questions and have a brief duration. As with the examinations, the time limit will be strictly enforced, with a penalty of five points per extra minute taken. Quizzes can be completed in the time limit if you are prepared, and you can view the correct quiz answers after they are due.

You cannot wait until the end of the semester to complete the quizzes; you must complete them as the semester progresses. **Quizzes are due on the dates indicated on the Course Calendar.** Think of failing to complete a quiz as missing an entire week of class.

When taking quizzes and exams, it is recommended that you save your responses as you complete each question.
Discussions & Worksheets

In the Nav Bar (Course Tools, Discussions), two Topics are of interest. Questions are designed to accommodate general questions, and it can be a great place to exchange information with your classmates. Worksheets will function much like the lab table in a physical geology laboratory classroom. There are six graded Worksheet posts in this course. You will be able to exchange information about the samples in your lab kit and compare notes on the physical properties of your samples. For each of the. You must post your own Worksheet in order to view other students' Worksheets. Your WS will be graded on the completeness of your submission. That is, if you submit a worksheet that isn’t entirely complete, you will not receive full credit. Note: The goal of the exercise is not to get every element of the Mineral/Rock Identification Worksheet correct on the first post but is instead for you to:

1. Work together collectively to evaluate the samples and determine which is which
2. Have a firm command of the physical properties of each of the minerals and rocks covered in the course.

Worksheets are only helpful if classmates communicate and exchange ideas regarding the samples' physical properties and identification. In order for online labs to have the same breadth and rigor as F2F labs, online group interchange with WS information is akin to F2F groups to interchange at lab tables. In both cases, students are assisting each other. The greatest results occur when information is exchanged daily, so try to post your WS as early as possible, exchange information, and don't get behind. That way, you have time to make adjustments.

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
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.

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.

**Deadlines Posted**

I set a lot of deadlines and restrictions in online courses. If you ever note that one of the postings appears to be erroneous, please call it to my attention. I check (and re-check, and re-check, and re-check!) the postings, but I’m human and sometime overlook the errors.

**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 and 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. Careers have ended because of academic dishonesty. If you have any questions about what does or does not constitute plagiarism, please let me know. In doing so, we can avoid what could potentially be a very costly and serious error. I take plagiarism very seriously and will not tolerate it.

**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

Tentative Lab Calendar on the following pages...
## GEOL 1103.502 Introductory Geology Lab
### Summer I 2021 Course Calendar

### Unit 1: Minerals

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<tr>
<th>Start Date</th>
<th>Module</th>
<th>Assignments</th>
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</thead>
<tbody>
<tr>
<td>5/17-5/19</td>
<td>Getting Started</td>
<td>Getting Started Quiz due 5/19 @ 11:59 PM</td>
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</table>
| 5/20       | Unit 1, Module 1: Mineral Physical Properties Part 1 | Quiz 1 due 5/20 @ 11:59 PM  
Mineral ID Worksheet 1 due 5/20 @ 11:59 PM |
| 5/24       | Unit 1, Module 2: Physical Properties Part 2 | Quiz 2 due 5/24 @ 11:59 PM  
Mineral ID Worksheet 2 due 5/24 @ 11:59 PM |
| 5/25       | Unit 1, Module 3: Physical Properties Review | Quiz 3 due 5/25 @ 11:59 PM  
Mineral ID Worksheet 3 due 5/25 @ 11:59 PM |
| 5/26-5/27  | Unit 1 Review                               | Review unit material                             |
| 5/31       | Unit 1 Mineral Exam                         | Unit 1 Exam due 5/31 @ 11:59 PM                 |

### Unit 2: Rocks

<table>
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<th>Start Date</th>
<th>Module</th>
<th>Assignments</th>
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| 6/2        | Unit 2, Module 1: Igneous Rocks             | Quiz 4 due 6/2 @ 11:59 PM  
Igneous Rocks Worksheet due 6/2 @ 11:59 PM |
| 6/3        | Unit 2, Module 2: Sedimentary Rocks         | Quiz 5 due 6/3 @ 11:59 PM  
Sedimentary Rocks Worksheet due 6/3 @ 11:59 PM |
| 6/7        | Unit 2, Module 3: Metamorphic Rocks         | Quiz 6 due 6/7 @ 11:59 PM  
Metamorphic Rocks Worksheet due 6/7 @ 11:59 PM |
| 6/8        | Unit 2, Module 4: Rocks in Your Head Review | Quiz 7 due 6/8 @ 11:59 PM                         |
| 6/9-6/10   | Unit 2 Review                               | Review unit material                             |
| 6/14       | Unit 2 Rock Exam                            | Unit 2 Exam due 6/14 @ 11:59 PM                  |
## Unit 3: Topographic Maps

<table>
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<tr>
<th>Start Date</th>
<th>Module</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>6/15</td>
<td>Unit 3, Module 1: Location</td>
<td>Quiz 8 due 6/15 @ 11:59 PM</td>
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<tr>
<td>6/16</td>
<td>Unit 3, Module 2: Contouring</td>
<td>Quiz 9 due 6/16 @ 11:59 PM</td>
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<tr>
<td>6/17</td>
<td>Unit 3, Module 3: River and Arid Maps</td>
<td>Quiz 10 due 6/17 @ 11:59 PM</td>
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<td>6/21</td>
<td>Unit 3, Module 4: Groundwater and Glaciation Maps</td>
<td>Quiz 11 due 6/21 @ 11:59 PM</td>
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<tr>
<td>6/22 - 6/23</td>
<td>Field Project and Surveys</td>
<td>Field Project and Course Survey due 6/22 @ 11:59 PM</td>
</tr>
<tr>
<td>6/24</td>
<td>Unit 3 Exam</td>
<td>Unit 3 Exam Due 6/24 @ 11:59 PM</td>
</tr>
</tbody>
</table>