Name: Dr. Mindy Faulkner  
Department: Geology  
Email: mgshaw@sfasu.edu  
Phone: 936-468-2236  
Office: E.L. Miller Science, Room 310  
Office Hours: by appointment  
Class meeting time and place: Online via Brightspace

This is an online class and the Discussion tool in Brightspace will have a “Questions about the Course” forum where students can ask questions, discuss problems you may be having with the material, or to help facilitate further understanding. If your questions cannot be resolved in this manner, please call or email to make an appointment.

Course Description:

This course is designed to provide an overview of the geology of economic mineral systems formed by magmatic-hydrothermal, sedimentary, and metamorphic processes. An emphasis will be on the natural controls on mineral resource localization, transportation mechanisms for metals and sulfur in the environment, and resource extraction. Students will be expected to research the physical and chemical characteristics of selected deposits and mining districts, including tectonic settings, geochemical investigations, and application of new developments in spatial characterization and remote sensing methods.

Student Learning Outcomes:

The student is expected to understand and apply the following concepts:

1. Identify the various environments in which mineral resources are formed.
2. Characterize the spatial distribution of economic minerals and their relationship to the tectonic environment.
3. Investigate the transportation mechanisms for metals and sulfur in the environment.
4. Differentiate the geochemical environments for mineral localization.
5. Understand the formation of placer deposits and heavy mineral sands in the sedimentary environment.

Course Materials:

Module information is compiled from the Resources for Exploration of Ore Resources list found in the Brightspace course. Journal articles and selected readings to supplement these materials will be provided online.
Course Calendar:

An outline of these topics will be posted on Brightspace as we progress through the semester. Journal articles are assigned in every module, and each week some you will be asked to submit video presentations of these journal articles. All journal article videos, exams, presentations, and research papers will be turned in through the dropbox feature on the Brightspace platform. Late work will incur a 20% reduction in grade for each 24 hours after the due date. The time stamp on your submission in the dropbox will determine your late penalty.

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Credit Hour and Time

**GEOL 5342** Exploration of Ore Resources content should require a minimum of 37.5 lecture contact hours during the semester, whether the class is offered face-to-face or online. Students are required to complete assignments based on readings from the primary literature, participate in online discussions regarding current research topics, and complete periodic assessments over the course content, including a final project or term paper. Students must also complete written assignments that assess their ability to evaluate current research in geoscience, including experimental procedures, and data analyses and interpretation. Successful completion of all elements for the course requires at least six hours of out-of-class student work each week.

**Grading Policy:**

There are 630 points available: journal article summaries (4 @ 25 points each), Journal article presentation discussions (12 @ 10 points each) module discussions (16 @ 10 points each), journal article presentation (1 @ 50 points each), a midterm exam (100 points), and one term paper (100 points). All written work will be processed through TurnItIn, a verification tool administered through the d2l platform to check for plagiarism and similarity of content. Your work must be in your own words and if you are using research material as the basis for your answer, you must cite your sources. The Dropbox feature on the d2l platform will be utilized, so no late work will be accepted. See the schedule for more detail.

We will discuss several of the major themes of each module using an online forum during the semester. It is your responsibility to have read the module content and be prepared to discuss and/or present questions regarding the relevant topics. The Discussion feature on the d2l platform will be utilized, please see the schedule for more detail.

A list of possible topics for your term paper along with detailed instructions will be available on d2l by July 20, 2021. If you have a suggestion about a possible research topic that would augment your personal research, please let me know.
Grade Scale: 90–100 = A, 80–89 = B, 70–79 = C, 60–69 = D, <60 = F

Graduate school is the time for you to develop your own thoughts and voice regarding research and scientific literature. If your written material is too similar to another student in the class, it will be assumed you are sharing answers – otherwise known as cheating. All students involved will receive a zero for the assignment for the first offense; the second offense will be referred to the SFA Judicial Office.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp if you have any questions.

Attendance Policy:
Attendance and participation is mandatory for understanding the material.

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.

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/.
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 student’s 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