Name: Dr. Mindy Faulkner  
Department: Geology  
Email: mgshaw@sfasu.edu  
Phone: 936-468-2236  
Office: E.L. Miller Science, Room 310  
Office Hours: Monday 12:00 – 3:00 p.m.; Tuesday 10:00 – 12:00 p.m., or 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 various sources found in the “Literature 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.

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**March 11 – 15: Spring Break**

| Mar 16 | Module 8: Disseminated Deposits             | Module Resources| Mar 24   |
| Mar 23 | **Module 9: Midterm Exam**                 |                 | **Mar 27**|
| Mar 30 | Module 10: Vein and Placer Deposits        | Module Resources| Apr 7    |
| Apr 6  | Module 11: Strata-bound and Sedimentary Deposits | Module Resources| Apr 14   |
| Apr 13 | Module 12: Ore Mineralization through Time | Module Resources| Apr 21   |
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 700 points available: **journal article presentations** (1 @ 25 points each), **journal article presentation discussions** (7 @ 25 points each), **module discussions** (12 @ 10 points each), **journal article summaries** (4 @ 25 points each), **online seminar participation** (4 @ 25 points each), **midterm exam** (80 points), and **one term paper over a major mining district** (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 the online discussion 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 on D2L for more detail.

In lieu of a field trip, we will be joined remotely by mining professionals representing different industries during the semester. These seminars will be scheduled for mutually convenient times (Mondays?), as determined by a class poll. Although there may be more scheduled, you must attend and participate in four seminars during the semester.

A list of possible mining districts for your term paper, along with detailed instructions, will be available on D2L by February 1, 2024. If you have a suggestion about a possible mining district 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

Attendance Policy:

Your online attendance and participation are mandatory for understanding the material.
Acceptable Student Behavior:

Classroom behavior (in-person or online) should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable, disruptive, or distracting behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend or participate in class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Academic Integrity (SFA Policy 4.1): 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.
Penalties for Academic Dishonesty

Penalties may include, but are not limited to, reprimand, no credit for the assignment or exam, resubmission of the work, make-up exam, failure of the course, or expulsion from the university.

Withheld Grades (SFA Policy 5.5): Ordinarily, at the discretion of the instructor of record and with the approval of the academic unit head, 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 by the deadline set by the instructor of record, not to exceed one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Military Service Activation (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. If a student has been found guilty of academic dishonesty, a grade of “WP” or “WH” may be changed to “WF” at the discretion of the faculty member. In the case of a grade change to “WF”, the course will not count towards the six-course drop limit since the student is incurring an academic penalty. Please read the complete policy here.

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 this website.

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 and seeking help, 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:

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

SFASU Human Services Counseling Clinic
www.sfasu.edu/humanservices/139.asp
Human Services Room 202
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
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)
Crisis Text Line: Text HELLO to 741-741