GEOL 3338 and 3038
Structural Geology and Structural Geology Lab
Spring 2024

Instructor: Zach Fleming
Office: Miller Science 305
Instructor's Email: zachariah.fleming@sfasu.edu
Lecture: MW 10:00-10:50am
Lab: W 2:00-4:30pm
Office Hours: MW 1-3pm; T 2-3pm and by appointment

I. INTRODUCTION
   A. This course will explore the deformation of the Earth through a combination of lectures, discussion, readings, laboratory exercises and field observations. You will learn to recognize geologic structures in rocks, maps, and imagery and understand their formation on a variety of scales, from hand sample to mountain belts. You will integrate material from prior courses to build a framework for crustal deformation. Many classes will include a short problem-solving session, pop quiz, “lab” type exercises as well as standard lectures. It is really important to attend all classes – you cannot learn and participate if you are not in class. (If you are ill – email us and stay home.) Class materials will be on our D2L site, and you should review those materials along with the reading and your class notes after every class. Labs and field trips will reinforce topics from class and so are required. Attendance for the full lab period is required, and some labs may require time outside of class/lab.

   B. A unit of credit is the semester hour, defined by the federal government as one class meeting per week (or its equivalent) for one 15-week semester. For each semester hour, you are expected to spend at least 2 hours per week in preparation and study.

II. STUDENT LEARNING OUTCOMES

Upon successful completion of GEOL 3338 and 3038 the student will:

SLO 1. Understand the types of deformation recorded in rocks and the forces which create them.
SLO 2. Be able to discern geologic structures in map pattern and in the field.
SLO 3. Interpret structural data in order to understand the deformational history of a study area.
SLO 4. Conduct data collection and planning in the field for the purposes of structural geology.

III. PROGRAM LEARNING OUTCOMES

GEOL 3338 _3038
PLO 1. Demonstrate knowledge of the fundamental core geologic concepts. (Concepts)

PLO 2. Execute geologic procedures and methods accurately, appropriately and efficiently. (Skills)

PLO 3. Apply principles of logic and reasoning to develop and analyze geologic problems. (Logical - Reasoning)

PLO 4. Demonstrate competence in using various geologic tools, including technology, to formulate, represent, and solve problems. (Critical thinking - Problem Solving)

PLO 5. Demonstrate proficiency in communicating geologic information in an appropriate form to the expected audience. (Communication)

III. INSTRUCTIONAL MATERIALS

Textbook: Structural Geology by Haakon Fossen
Supplies: Protractor (at least 4”), Ruler, pads of 8.5”x11” vellum and cheap tracing paper, two 4H pencils, two regular hardness pencils, fine point and regular sharpie markers, 24 pack of colored pencils, calculator

IV. COURSEWORK

Assignments: Assignments will be every week except for exam and holiday weeks. “Take home” assignments will be posted on Monday and turned in on Friday by 3PM on D2L. But many will be part of in class activities. The assignments are meant to keep you on pace with regards to the material being covered during the week.

Labs: To receive full credit for your lab you will be required to: participate in each lab, complete the entire lab, and turn the lab in on time. Late laboratory assignments will receive a 25% deduction in grade for each day late and will not be accepted after 3 days. Each lab will be weighted equally.

Field Trip: There will be a mandatory field trip. Please plan ahead for this and if you are unable to attend you must let me know ahead of time so that a make-up assignment can be provided. Failure to do so will result in a letter grade drop in your grade.

Lab Quizzes: Lab quizzes will be given throughout the semester in order to assess your understanding of the lab material.

Exams: There will be two mid-term exams and a final exam (to be scheduled). Mid-term exams will cover both in class and reading material. The dates for these exams are noted in the Course Schedule below.

V. SEMESTER GRADE COMPUTATION

The assignments, labs, quizzes, and exams are weighted as follows:
Assignments 10%
Labs 30%
Lab Quizzes 10%
Exam I 15%
Exam II 15%
Final Exam 20%

Final grades will be reported as follows: A: 93-100; A-: 90-93; B+: 87-90; B: 83-87; B-: 80-83; C+: 77-80; C: 73-77; C-: 70-73; D+: 67-70; D: 63-67; F: 0-63.

VI. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE INSTRUCTOR

Attendance: Student attendance is strongly recommended. Failure to attend scheduled class meetings will make it difficult for the student to earn a satisfactory grade. Given the circumstances surrounding this semester (i.e. COVID-19) attendance may be difficult for some, however, you will still be held accountable for the material.

Makeup/Late Work: No makeup exams or quizzes will be given without pre-approval by the instructor before the exam/quiz takes place, barring emergencies. Changes to due dates will be announced in class. Students are responsible for all material and announcements regardless of absences. Late work will be penalized 10% a day and not accepted after work is handed back.

Civility: Individuals are expected to be cognizant of what a constructive educational experience is, be respectful, and show civility to those participating in a learning environment, including field trips and any other situation whose purpose is to promote or enhance learning. Failure to do so can result in disciplinary action up to and including expulsion. Minimal civility includes:

- Being in class on time;
- Staying in class for the entire class period;
- Avoiding such uncivil conduct as talking, sleeping, reading papers or magazines, or working on other assignments;
- Using socially acceptable language in classroom discussions and elsewhere in learning situations

Extra Credit Assignments: Extra credit opportunities may or may not be offered. The decision regarding whether or not to offer extra credit will be up to your instructor.

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<th>Week</th>
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<td>3</td>
<td>1/30-2/1</td>
<td>Strain</td>
<td>Geologic Maps</td>
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Academic Integrity (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.

**Withheld Grades Semester Grades Policy (5.5)**

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 coursework 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 to compute the grade point average. For additional information, go to https://www.sfasu.edu/policies/course-grades-5.5.pdf.

**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 promptly may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

**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, seeking help, 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:**

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

SFA Human Services Counseling Clinic Human Services, Room 202
www.sfasu.edu/humanservices/139.asp
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
tehub@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)
• johCrisis Text Line: Text HELLO to 741-741