CoSM Class Syllabus / Policy
2016 / Spring Semester
GOL 338L.011
Structural Geology Lab

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Office Hours: MWF: 11-12, MTR: 2-5; or by appointment

Class meeting time and place: W: 2:30 – 5:00, Room 326 Miller Science

Please feel free to stop by any time to ask questions, discuss any problems you may be having with the material or to help facilitate further understanding. If these hours conflict with your schedule, please call or email to make an appointment.

Course Description:
This lab is a comprehensive, hands-on introduction to the techniques commonly used to solve problems in structural geology. Required lab fee.

Text and Materials:
- Laboratory manual, available at Jack Backers or Barnes & Noble;
- A packet of drafting materials which are available from Barnes & Noble;
- A 3-ring binder for the manual; and
- Calculator that can support trig functions.

You will need all of these supplies before our first laboratory meeting on Wednesday, January 20, 2016. Please let me know immediately if there are any problems obtaining the drafting materials or laboratory manual.

The laboratory manual consists of explanations and exercises that support basic techniques used in the study of structural geology. These techniques will be utilized during this course and at field camp. Do not come to the lab totally "cold", not having looked at the lab or tried to work the problems. You will spend the whole lab time just reading the manual. The problems will baffle you because you didn’t have time to read the text carefully. You will spend countless hours after the lab meeting trying to work the problems and quite possibly not finish the lab before the deadline. When that happens you are in a double bind—not only do you lose points because you didn’t turn the lab in on time, but you also have to move on to the next lab. As a result, there may be lab techniques that you never master because you didn’t work certain problems—and that will hit you hard at test time!

- Read each lab write-up in the manual before coming to the lab and work ahead on the lab problems.
• These laboratory exercises build on each other. Some of the techniques you learn in early labs are used in later labs. It is important to stay on top of these exercises, so don't get behind!

• The concepts get progressively more challenging and build upon earlier exercises. Thus, it is essential to give adequate study time to each lab.

Course Calendar:

<table>
<thead>
<tr>
<th>Date</th>
<th>Exercise</th>
<th>Topic</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 20</td>
<td>1</td>
<td>Basic Drafting Techniques, Trigonometry Review, Map Scales</td>
<td>Jan 25</td>
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<tr>
<td>Jan 27</td>
<td>2</td>
<td>Topographic maps and profiles, contouring</td>
<td>Feb 1</td>
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<tr>
<td>Feb 3</td>
<td>3</td>
<td>Geologic maps and cross-sections; faults &amp; folds; block diagrams</td>
<td>Feb 8</td>
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<td>Feb 10</td>
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<td>Diagnostic Exam</td>
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<tr>
<td>Feb 17</td>
<td>4</td>
<td>Outcrop patterns; contact-contour intersections; 3-pt problems; etc.</td>
<td>Feb 22</td>
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<td>Feb 24</td>
<td>5</td>
<td>Thickness &amp; Depth determinations; apparent dip; rake</td>
<td>Feb 29</td>
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<tr>
<td>Mar 2</td>
<td></td>
<td>Practice Midterm</td>
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<td>Mar 9</td>
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<td><strong>Midterm Exam</strong></td>
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<tr>
<td>Mar 16</td>
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<td>Spring Break – no class</td>
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<td>Mar 23</td>
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<td>Easter Break – no class</td>
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<td>Mar 30</td>
<td>6</td>
<td>Fault plane problems; geologic histories</td>
<td>Apr 4</td>
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<td>Apr 6</td>
<td>7</td>
<td>Stereonets, part 1 – Introduction</td>
<td>Apr 11</td>
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<td>Apr 13</td>
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<td>Deep Karst Conference – no class</td>
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<td><strong>Structure Field Trip April 14-17</strong></td>
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<td>Apr 20</td>
<td>8</td>
<td>Stereonets, part 2 – Rotational problems.</td>
<td>Apr 25</td>
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<tr>
<td>Apr 27</td>
<td>9</td>
<td>Stereonets, part 3 – Statistical Applications Geologic history, field trip data processing</td>
<td>May 2</td>
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<tr>
<td>May 4</td>
<td></td>
<td><strong>Final Exam</strong></td>
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*NOTE: Labs may be due early during weeks in which there is a field trip or other conflict.*
Attendance

It is imperative that you attend all labs, plan on staying for the entire lab period, and remain focused while in the class. There will be a lot of information that will be given, and you must stay on top of this lab. This is also your chance to ask questions. Questions are encouraged and welcome; if you do not understand the concepts, I guarantee you are not alone. Be bold, be “that” guy or girl, ask questions.

- **Laboratory exercises are explained in class on Wednesday afternoon and numerous examples are provided.**
  - The lab will usually begin with a short presentation that has lots of tips about how to work that week’s problems. If you come late, you will miss part or all of the presentation. *Thus it is very important to come to lab on time!* The lab instructor is not going to repeat the tips and instructions.

- **It is very important to attend every lab session. Laboratory exercises are due on Monday, because…..**
  - On Tuesday, you should already be reading the next lab and starting to work the problems. If you do, then when you come to lab the following day, you will have had time to read the new material and to think about the problems. If you have been working ahead, as suggested, then you should be able to finish all the problems *during* the lab session.

- **Missed labs may not be made up except in the case of documented excused absences. If you never turn in a lab that will devastate your grade—plus, you won’t be adequately prepared for the lab tests.**
  - *Lab assignments and cross-sections are given on Wednesday at the lab meeting and are due Monday at 5 p.m.* After that date, your lab write-up will either not be accepted, or will lose major points. **Once the labs for a particular chapter have been graded and returned, late work will not be accepted.**

- **Can you leave lab early?**
  - Yes – *if you have finished.* Otherwise, count on staying the whole time. Lab time is your chance to ask lots of questions. During the lab, I will be happy to answer any questions you have regarding how to work the lab exercises. On the lab *tests* you will, of course, be on your own—which is why it is so important to learn all of the different techniques presented each week in lab.

Grades

The lab is 50% of your total grade for GOL 338. Weekly lab exercises will be graded and returned. The normal grade scale will apply: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, < 60 = F. Your average will be given to Dr. Barker and used to compute your final grade in the course. Lab grades will be posted on d2l so you can keep track of your progress.
Diagnostic Exam

University policy dictates that we administer a national standardized diagnostic exam to each student before they complete their capstone course. Your exam is tentatively scheduled for Wednesday, February 10th. Please begin to prepare by studying the material from your core geology classes (Introductory Geology, Historical Geology, Mineralogy, and Petrology). Review materials are available from pertinent faculty and posted on the d2l webpage for this class.

Field Trip

This class has a mandatory field trip to Oklahoma April 14-17, 2016. This is a great trip to see spectacularly folded and faulted rocks in the Arbuckle and Ouachita Mountains of Oklahoma. On this field trip you will use things you have learned in the lecture, lab, and field methods. This will also be a chance for you to take your field camp supplies for a trial run and get used to mapping techniques you will use this summer. Note: Because it is so important, the field trip is mandatory; anyone who misses the trip will receive an incomplete for the course and will have to make it up the next time Structure is taught.

Electronic Devices

Laptops or other computers, cell phones, iPods, cameras, camcorders, Blackberries, and all other electronic devices CAN NOT BE USED DURING LECTURE OR LAB and must be turned off and put away. We have had problems with students surfing the web, facebooking, emailing, gaming, etc., during class time.

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.

Please read the complete policy at 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.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C. Since you will not receive a separate grade for your participation in the lab, students requesting a WH must petition their lecture instructor for a withheld grade.

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/.