GEOL 1103 Physical Geology Lab (1 credit)
Spring 2020

Lab Section: 01Z T 1:00pm-2:50pm
ROOM: VIN 139 ONLINE

Instructor: Mrs. Jessica A. Garza, M.S.
Email: jgarza85@angelo.edu
Office hours: VIN 130, MWF 9:15-9:45am, TR 11-11:30am, or by appointment ONLINE

REQUIRED MATERIALS:

- LAB MANUAL: GEOL 1103, Physical Geology Laboratory Manual, Heather L. Lehto
- ASU email account that you check regularly
- Blackboard course site: http://blackboard.angelo.edu

STUDENT LEARNING OBJECTIVES: Learning outcomes will be evaluated on exams, lab projects, and an IDEA course evaluation

1) Describe and draw the layers of the Earth, including the chemically and physically different layers.
2) Describe the theory of plate tectonics including identifying plate boundaries, describing plate motions at boundaries, and identifying landforms/features associated with each boundary.
3) Identify rocks and minerals and describe their formation processes.
4) Identify and describe various volcanic hazards.
5) Identify and describe various earthquake hazards.
6) Describe how mountains are formed including how stress causes deformation and what kinds of deformation result.
7) Place geologic events in order using the geologic principles and correlate layers on a regional scale.
8) Evaluate good and bad aspects of energy resources.
9) Describe where our water comes from in Texas and how humans can affect those sources.
10) Explain variations in the ocean and coastlines.
11) Describe how climate changes and what affect humans have on climate change.

CORE CURRICULUM STUDENT LEARNING OUTCOMES: The following list of core curriculum student learning outcomes will be met and measured during this course.

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Assessment Method</th>
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<tbody>
<tr>
<td>1. Gather, analyze, evaluate, and synthesize information relevant to a question or issue.</td>
<td>Lab Quiz</td>
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<td>2. Develop, interpret, and express ideas through effective visual communication.</td>
<td>Lab Assignment</td>
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<td>3. Manipulate and analyze numerical data and arrive at an informed conclusion</td>
<td>Homework/In-class Assignment</td>
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<tr>
<td>4. Manipulate and analyze observable facts and arrive at an informed conclusion</td>
<td>Average Lab Grade</td>
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<tr>
<td>5. Work effectively with others to support and accomplish a shared goal.</td>
<td>IDEA Forms</td>
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</table>
ATTENDANCE POLICY: You are expected to attend all scheduled lab meetings. Please inform me well ahead of time if you will need to be absent for any reason including religious holidays. NOTE: You are NOT automatically dropped if you stop attending class. November 1 is the last day to drop a course.

CELL PHONES AND OTHER ELECTRONIC DEVICES: Electronics should not be out during labs. The use of any electronic device not authorized by the instructor during a test may result in the forfeiture of your grade for that test. All electronic devices should be turned off and stored out of sight during tests.

GRADING:
- 2 lab practicals (5% each)
- 8 graded lab exercises (10% each)
- 6 pre-lab quizzes (2% each, drop the lowest grade)

Make-up a single lab grade by participating on an optional field trip and turning in a brief project report.

Make-up lab practicals will be given ONLY under extenuating circumstances. Prior email notification is needed for a make-up lab practical. To make-up a lab you will need to either attend a different session during the week you missed or speak to you professor for alternate arrangements. You may NOT make-up the field trip. There will be NO makeup pre-lab quizzes given.

FIELD TRIPS: On field trips you will get a chance to apply concepts discussed in class to describe and interpret outcrops of rocks and sediments. On the optional weekend trips we will travel in university vehicles. No special equipment is required but space is limited! You may go on more than one optional trip, but you can only use one field trip project to replace a single lab assignment grade.

Tentative schedule:

1) **Required** field trip to San Angelo State Park during lab time. Tuesday afternoon March 24. We will meet at San Angelo State Park to review and practice rock and mineral identification skills on Permian and younger rocks. Leader: Jessica Garza.

SMARTWORK PRE-LAB QUIZZES

To complete the Pre-Lab Reading Quizzes you will need to register with Smartwork using the registration code you got when you purchased the book. If you didn’t get a code when you purchased the book you can purchase one during the registration process. Use the following instructions to create an account with Smartwork:

To enroll in SmartWork you will need a valid ASU email address and a Registration Code from W. W. Norton. Registration codes are bundled with new books at your instructor’s request. If you do not have a registration code, you may purchase one when signing up.

Register For Smartwork

1. Click on the link for any of the Pre-Lab Reading Quizzes from the link in the menu in Blackboard.
2. Select “No, I need to register, purchase, or sign up for trial access.” Click the green button to continue.

3. Fill out all fields and enter either the registration code that came with your book or select the “I want to purchase access” option. NOTE: Use your ASU email as the email address for your Smartwork account. Don’t forget to record your account information for future reference!

Access your Pre-Lab Quizzes through the links in the appropriate area on Blackboard.

CLASS PREPARATION ASU EMAIL: Since class announcements will be routinely distributed via email and Blackboard, you will need to regularly check your ASU email account and our course Blackboard site (daily). All course correspondence will be through your ASU email account and Blackboard. Please see the email policy in Bb for more details. ASU provides Internet and email services to you at any of the computer labs on campus. Call 942-2911 to set this up if necessary.

ACADEMIC INTEGRITY
Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the Statement of Academic Integrity.

PLAGARISM
Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.

COPYRIGHT POLICY
Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

STUDENTS WITH DISABILITIES:
1. “Angelo State University is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), and subsequent legislation.”

2. The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting the Office of Student Affairs, University
Center, Room 112 at (325) 942-2047 or (325) 942-2211 (TDD/FAX) or by e-mail at studentservices@angelo.edu to begin the process. The Office of Student Affairs will establish the particular documentation requirements necessary for the various types of disabilities.

Reasonable accommodations will be made for students determined to be disabled or who have documented disabilities.

TITLE IX
The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

INCOMPLETE GRADE POLICY: (OP 10.11 Grading Procedures)
It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required.

STUDENT ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAYS: “A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence.” Please see ASU Operating Policy 10.19.

SYLLABUS CHANGES: The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student’s responsibility to look for such communications about the course on a daily basis.
COURSE EVALUATION: Students are provided the opportunity and are strongly encouraged to participate in a course evaluation at the end of the semester.

GEOLOGIC EXHIBITION ORGANIZATION (GEO):

GEO, the student organization of all interested in geology (not just majors/minors), meets almost every Wednesday @ 6:00PM. GEO is a student chapter of the American Association of petroleum Geologists (www.aapg.org). Sigma Gamma Epsilon, the national honor society of the earth sciences is related to GEO.

YOU CAN MAJOR OR MINOR IN GEOLOGY @ ASU! See the BS in Geoscience requirements at https://www.angelo.edu/physics/geoscience_degree.php. A Geology Minor requires 18 hours of geology courses. Good and rewarding careers exist for geologists, geophysicists, hydrogeologists, secondary science teachers, and petroleum engineers. Talk to your professor and read http://www.angelo.edu/dept/physics/Geosciences/geoscience_careers.php.

FINAL NOTE:
It is my goal to make this class both interesting and informative for you. With a reasonable amount of effort, it should be possible for everyone to meet the course objectives and earn a passing grade. With additional effort, aptitude, and investment of time, students may earn even higher course grades. If at any time you run into difficulties with the material, or need assistance or clarification, please do not hesitate to ask for help. I am here for you, and I will be glad to entertain any reasonable requests.
<table>
<thead>
<tr>
<th>Class Day</th>
<th>Pre-lab Quiz Due</th>
<th>Pre-lab Reading</th>
<th>Lab Exercise</th>
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<tbody>
<tr>
<td>1/14</td>
<td>None</td>
<td></td>
<td>No labs this week!!!</td>
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<tr>
<td>1/21</td>
<td></td>
<td></td>
<td>No labs this week!!!</td>
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<tr>
<td>1/28</td>
<td></td>
<td>pg. 1-7</td>
<td>1: Topographic maps and aerial photos</td>
</tr>
<tr>
<td>2/4</td>
<td>Monday 2/3 @ 11PM</td>
<td>pg. 18-30</td>
<td>2: Rock-forming minerals</td>
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<tr>
<td>2/11</td>
<td>Monday 2/10 @ 11PM</td>
<td>pg. 35-37</td>
<td>3: Igneous Rocks</td>
</tr>
<tr>
<td>2/18</td>
<td>Monday 2/17 @ 11PM</td>
<td>pg. 42-48</td>
<td>4: Sedimentary Rocks</td>
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<tr>
<td>2/25</td>
<td>Monday 2/24 @ 11PM</td>
<td>pg. 54-57</td>
<td>5: Metamorphic Rocks</td>
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<tr>
<td>3/3</td>
<td></td>
<td>Lab Quiz 1: Minerals and Rocks (Labs 2-5)</td>
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<tr>
<td>3/10</td>
<td>Spring Break</td>
<td>Spring Break</td>
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<tr>
<td>3/17</td>
<td>Spring Break Extension</td>
<td></td>
<td>No labs this week!!!</td>
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<tr>
<td>3/23</td>
<td></td>
<td>NO LAB THIS WEEK</td>
<td></td>
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<tr>
<td>3/30</td>
<td>No pre-lab Quiz</td>
<td>pg. 62-63</td>
<td>6: San Angelo State Park Lab Report</td>
</tr>
<tr>
<td>4/6</td>
<td>Monday 4/6 @ 11PM</td>
<td>pg. 68-73</td>
<td>7: Block diagrams of folded and faulted rocks</td>
</tr>
<tr>
<td>4/13</td>
<td>Monday 4/13 @ 11PM</td>
<td>pg. 90-92</td>
<td>8: Constructing a geologic cross section</td>
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<tr>
<td>4/20</td>
<td></td>
<td></td>
<td>Review for Lab Quiz 2</td>
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<tr>
<td>4/27</td>
<td></td>
<td>Lab Quiz 2: Topographic and geologic maps (Labs 1 and 6-8)</td>
<td></td>
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<tr>
<td>5/5</td>
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<td></td>
<td>No labs!!!!</td>
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3 [http://www.angelo.edu/dept/writing_center/academic_honesty.php](http://www.angelo.edu/dept/writing_center/academic_honesty.php)