GEOL 1101 Earth Science Lab (1 credit)
Spring 2020
Section D1Z and D2Z Meets online

INSTRUCTOR: Dr. Heather L. Lehto
EMAIL: Heather.Lehto@angelo.edu
OFFICE HOURS: VIN 127, T 9:30-11am and 2-4pm, W 11am-12pm, R 9:30-11am or by appointment
VIRTUAL OFFICE HOURS: Online through Collaborate, W 10-11am, F 10-11am and 3-4pm
Prerequisite courses: None

PREREQUISITE SKILLS
Accessing internet web sites, use of ASU Library resources, and proficiency with Microsoft Word and/or PowerPoint are expectations of the Health Science Professions Program. Computer access requirements are further delineated in the Undergraduate Handbook. Tutorials for ASU Library and for Blackboard are available through RamPort. The ASU Undergraduate/Graduate Student Handbook should be reviewed before taking this course.

COURSE DELIVERY
This is an online course offering. The course will be delivered via the Blackboard Learning Management System. The course site can be accessed at http://blackboard.angelo.edu. The course is organized into modules based on like topics. Each module is then broken down by week and weeks run from Monday to Sunday. All assignments, labs, discussion posts, exams, and group projects on Sunday @11:59pm, unless otherwise stated.

BROWSER COMPATIBILITY CHECK
It is the student’s responsibility to ensure that the browser used to access course material on his/her computer is compatible with ASU’s Blackboard Learning System. The faculty reserve the right to deny additional access to course assignments lost due to compatibility issues. Students are responsible for reviewing the guidelines posted in this course regarding accessing Blackboard assignments. Problems in this area need to be discussed with faculty at the time of occurrence, either via a phone call (preferred) during posted acceptable hours for calling, or via email notification during times outside those posted for calls.

Be sure to perform a browser test. Select the “Support” tab from the Blackboard homepage (http://www.blackboard.angelo.edu) Select “Test your Browser” option.

COURSE DESCRIPTION
An introduction to the study of the Earth including the atmosphere, geosphere, hydrosphere, and cryosphere. The course will cover general overview of topics such as: rocks and minerals, streams, the ocean, groundwater, weather, climate, plate tectonics, and natural hazards.

REQUIRED MATERIALS:

1 A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
- Smartwork Access Code (buy with textbook or online)
- ASU email account that you check regularly
- [Blackboard](#)
- Computer with MAC or Windows Operating System
- High Speed Internet Access
- Webcam and microphone
- Refer to Angelo State University's Distance Education website for further technology requirements: [http://www.angelo.edu/distance_education/](http://www.angelo.edu/distance_education/)

### STUDENT LEARNING OBJECTIVES
Learning outcomes will be evaluated by online discussions, exams, lab projects, and an IDEA course evaluation.

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Assignment(s) or activity(ies) validating outcome achievement:</th>
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<tbody>
<tr>
<td>Describe the structure of the Earth and the materials it is made of.</td>
<td>Chapters 1, 3, 4, 5, &amp; 6. Smartwork Homework 1-5, Discussion 2, Labs 1-4</td>
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<tr>
<td>Explain how humans use energy and mineral resources in our daily lives, and how these resources form.</td>
<td>Chapter 11, Smartwork Homework 6, Discussion 3</td>
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<td>Describe how plate tectonics shapes the Earth.</td>
<td>Chapters 2, 4, 7, &amp; 8, Smartwork Homework 7-10, Discussion 4 &amp; 5</td>
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<td>Place geologic events in order using the geologic principles and correlate layers on a regional scale.</td>
<td>Chapter 9, Smartwork Homework 10, Lab 5</td>
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<tr>
<td>Describe how water moves around the Earth.</td>
<td>Chapter 13, 15, &amp; 16, Smartwork Homework 12 &amp; 13, Discussion 6 &amp; 7, Labs 6 &amp; 7</td>
</tr>
<tr>
<td>Explain the fundamental processes that create weather and control climate.</td>
<td>Chapters 17, 18, 19, &amp; 20, Smartwork Homework 14-16, Discussion 8 &amp; 9, Labs 8 &amp; 9, Group Activity</td>
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<tr>
<td>Describe how the universe and solar system were formed and their current structure.</td>
<td>Chapters 21 &amp; 22, Smartwork Homework 17, Discussion 10, Lab 10</td>
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### GRADING

<table>
<thead>
<tr>
<th>10 Lab Activities (6% each)</th>
<th>60%</th>
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<tr>
<td>10 Pre-lab reading quizzes (4% each)</td>
<td>40%</td>
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### GRADING SYSTEM

<table>
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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>100-90%</td>
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<tr>
<td>B</td>
<td>89-90%</td>
</tr>
<tr>
<td>C</td>
<td>79-70%</td>
</tr>
<tr>
<td>D</td>
<td>69-60%</td>
</tr>
<tr>
<td>F</td>
<td>59-0%</td>
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LAB ACTIVITIES
There will be 10 lab activities which will comprise the bulk of the grade for lab. Lab activities will include four (4) that cover identifying mineral and rock samples and will use Smartwork (the same platform used for your lecture homework, to learn how to register for Smartwork see Blackboard). The rest of the labs will be completed through Blackboard but will often use tools from other websites. The labs will not open until you have completed the pre-lab reading quizzes.

PRE-LAB READING QUIZZES
Each lab has pre-lab reading and/or videos to watch that include content necessary to complete the labs. This material should be read before taking the pre-lab reading quizzes. Once you have completed the pre-lab reading quiz, the lab activity will open and the lab can then be completed.

STUDENT RESPONSIBILITY & ATTENDANCE
This class is asynchronous, meaning you do not have to be on-line at a certain time. There are readings which you will have to complete to be able to adequately participate in individual assignments and group discussions. In order to complete this course successfully, you do have to participate in all course activities i.e. discussion boards, lab projects, homework, etc. Students are expected to engage in course activities and submit work by due dates and times. For planning purposes, this class will probably require a minimum of 6-9 study hours per week on average.

COMMUNICATION
Faculty will respond to email and/or telephone messages within 48 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Written communication via Blackboard: It is an expectation of this class that you use formal writing skills giving appropriate credit to the source for your ideas. Follow AMA 10th edition guidelines for referencing.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes.

USE GOOD "NETIQUETTE":
- Check the discussion frequently and respond appropriately and on subject.
- Focus on one subject per message and use pertinent subject titles.
- Capitalize words only to highlight a point or for titles. Otherwise, capitalizing is generally viewed as SHOUTING!
- Be professional and careful with your online interaction. Proper address for faculty is by formal title such as Dr. unless invited by faculty to use a less formal approach.
- Cite all quotes, references, and sources.
- When posting a long message, it is generally considered courteous to warn readers at the beginning of the message that it is a lengthy post.
- It is extremely rude to forward someone else's messages without their permission.
- It is fine to use humor, but use it carefully. The absence of face-to-face cues can cause humor to be misinterpreted as criticism or flaming (angry, antagonistic criticism). Feel free to use emoticons such as J or :) to let others know you are being humorous.
(The "netiquette" guidelines were adapted from Arlene H. Rinald’s article, The Net User Guidelines and Netiquette, Florida Atlantic University, 1994, available from Netcom.)

ASSIGNMENT SUBMISSION
In this class, some assignments will be submitted through the Assignments link in the Blackboard course site. This is for grading purposes. Issues with technology use arise from time to time. If a technology issue does occur regarding an assignment submission, email me at heather.lehto@angelo.edu and attach a copy of what you are trying to submit. This lets your faculty know you completed the assignment on time and are just having problems with the online submission feature in Blackboard. Once the problem is resolved, submit your assignment through the appropriate link. This process will document the problem and establish a timeline. Be sure to keep a backup of all work.

LATE WORK OR MISSED ASSIGNMENTS POLICY
The course is set up based on 1 week long modules. The week begins on Monday and ends on Sunday. Assignment due dates are shown on the calendar/schedule or posted within Blackboard. Late assignments are not accepted without prior approval of faculty. Faculty reserve the right to deduct points for late assignments that are accepted past the original due date.

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.

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 (AAPG) and Sigma Gamma Epsilon, the national honor society of the earth sciences.

YOU CAN MAJOR OR MINOR IN GEOLOGY @ ASU!
See the BS in Geoscience requirements. A Geology Minor requires 18 hours of geology courses. Good and rewarding careers exist for geologists, geophysicists, hydrogeologists, secondary science teachers, and petroleum engineers.

GENERAL POLICIES RELATED TO THIS COURSE
All students are required to follow the policies and procedures presented in these documents:

Angelo State University Student Handbook
Angelo State University Catalog
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 to disciplinary action and possible expulsion from ASU.

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

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES
ASU 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 of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

INCOMPLETE GRADE POLICY
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. See ASU Operating Policy 10.11 Grading Procedures for more information.

PLAGIARISM
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. Resources to help you understand this policy better are available at the ASU Writing Center.
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. See ASU Operating Policy 10.19 Student Absence for Observance of
Religious Holy Day for more information.

TITLE IX AT ANGELO STATE UNIVERSITY
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.
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<thead>
<tr>
<th>Week #</th>
<th>Week of</th>
<th>Module</th>
<th>Topic for the Week</th>
<th>Reading</th>
<th>Discussion/Group Activity</th>
<th>Smartwork Homework</th>
<th>Pre-Lab Reading Quiz</th>
<th>Lab Activities</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>January 13-19</td>
<td>Welcome Module</td>
<td>Welcome Module</td>
<td></td>
<td>Memorable Geologic Event (Discussion)</td>
<td></td>
<td>Assignment: Structure of the Earth</td>
<td>Pre-lab reading quiz: Baloney Detection Kit</td>
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<tr>
<td>2</td>
<td>January 20-26</td>
<td>University Closed (January 20) Module I: Earth Structure and Materials</td>
<td>Earth Structure, Continental Drift and Plate Tectonics</td>
<td>Ch 1 &amp; Ch 2</td>
<td>The Unifying Theory of Geology (Discussion)</td>
<td></td>
<td>Assignment: Continental Drift and Plate Tectonics</td>
<td>Pre-lab reading quiz:</td>
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<tr>
<td>4</td>
<td>February 3-9</td>
<td>Module I: Earth Structure and Materials</td>
<td>Igneous Rocks</td>
<td>Ch 4</td>
<td>Assignment: Igneous Rocks</td>
<td></td>
<td>Assignment: Igneous Rocks</td>
<td>Pre-lab reading quiz:</td>
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<tr>
<td>7</td>
<td>February 24- March 1</td>
<td>Module II: Earth Hazards and Geologic Time</td>
<td>Volcanoes and Mountain Building</td>
<td>Ch 4 &amp; Ch 7</td>
<td>Assignment: Volcanoes</td>
<td></td>
<td>Assignment: Volcanoes</td>
<td>Pre-lab reading quiz:</td>
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<tr>
<td>8</td>
<td>March 2-8</td>
<td>Module II: Earth Hazards and Geologic Time</td>
<td>Earthquakes and Geologic Time</td>
<td>Ch 8 &amp; Ch 9</td>
<td>Assignment: Earthquakes</td>
<td></td>
<td>Assignment: Geologic Time</td>
<td>Pre-lab reading quiz:</td>
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<tr>
<td>9</td>
<td>March 9-15</td>
<td>University Closed (Spring Break!)</td>
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<td>12</td>
<td>March 30 – April 5</td>
<td>Module III: Energy Resources and the Hydrologic Cycle</td>
<td>Oceans</td>
<td>Ch 15 &amp; 16</td>
<td>Beach Erosion (Discussion)</td>
<td></td>
<td>Assignment: Oceans</td>
<td>Pre-lab reading quiz:</td>
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<tr>
<td>13</td>
<td>April 6-12</td>
<td>Module IV: Weather and Climate</td>
<td>Heating the Atmosphere and Weather Phenomena</td>
<td>Ch 17, 18, &amp; 19</td>
<td>The Ozone Layer and The Greenhouse Effect (Discussion)</td>
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<td>Assignment: The Atmosphere</td>
<td>Pre-lab reading quiz:</td>
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<tr>
<td>14</td>
<td>April 13-19</td>
<td>Module IV: Weather and Climate</td>
<td>Climate</td>
<td>Ch 20</td>
<td>Evaluating news articles about climate change and wildfires (Discussion)</td>
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<td>Assignment: Climate</td>
<td>Pre-lab reading quiz:</td>
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<tr>
<td>15</td>
<td>April 20-26</td>
<td>Module V: The Universe and the Solar System</td>
<td>The Structure of the Universe and our Solar System</td>
<td>Ch 21 &amp; 22</td>
<td>Should Pluto be allowed back in? (Discussion)</td>
<td></td>
<td>Assignment: The Universe and our Solar System</td>
<td>Pre-lab reading quiz:</td>
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