

**GEOL 1301 Earth Science Lecture (3 credits)**  
**Spring 2022**  
**Section D10 and D20 Meets online**

**INSTRUCTOR:** Dr. Heather L. Lehto

**EMAIL:** Heather.Lehto@angelo.edu

**OFFICE HOURS:** In-Person, MWF 10-11am, VIN 127, or by appointment

**VIRTUAL OFFICE HOURS:** Online through Blackboard, TBD, or by appointment

Prerequisite courses: None

**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:**

- TEXTBOOK: [Earth Science, Lumen Learning](#)<sup>i</sup> (open-source, free textbook)
- [TopHat Access](#)<sup>ii</sup> (can be purchased through bookstore)<sup>1</sup>
- ASU email account that you check regularly
- Blackboard
- Computer with MAC or Windows Operating System
- High Speed Internet Access
- Webcam and microphone (if you are unable to buy a webcam, please email me for assistance)

**GETTING HELP FOR COURSEWORK**

I will be holding both in-person and virtual office hours this semester ([these are listed above, under my email](#)). You are also welcome to make an appointment to meet me at a different time if you need to. In addition, if you have a question and I am in my office (or walking around the building) feel free to stop me and ask. You can also post in the I Have a Question discussion forum in Blackboard (either with your name or anonymously).

We also have a geology tutor in the [Tutoring Office](#)<sup>iii</sup>. I will post the name of the tutor, their email, and their tutoring hours in Blackboard.

Another valuable source of help are your fellow classmates. It is helpful to get to know a few people in class and exchange contact info. You might also consider forming a student study group that meets regularly to work on assignments or study for exams. A good peer support system is invaluable in this and future courses.

**TECHNICAL SUPPORT**

Should you need help with Blackboard, Rampart, ASU email accounts, passwords resets, etc. you can contact the [ASU IT Help Desk](#)<sup>iv</sup> (325-942-2911). They should be able to help you troubleshoot your issue and resolve it. If they can't fix the issue please let me know, especially if it will affect your ability to complete your coursework.

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<sup>1</sup> 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.

## **COURSE DELIVERY**

This is an online course that will be delivered via [Blackboard](#)<sup>v</sup>. If you choose, you can complete this course without visiting the ASU campus. This course is also asynchronous, meaning you do not have to be on-line at a certain time.

To access and complete this course you will need to know how to access internet web sites, use ASU Library's resources, and be familiar with Microsoft Word and/or PowerPoint.

You will also need to know how to access and navigate the course in Blackboard. If you are unfamiliar with Blackboard you can find information and tutorials our Blackboard course in the 'Help and Info about the class' section in the main menu or on the Technology Support tab at the very top of the page in Blackboard. If you have trouble finding these resources please contact me or the [ASU IT Service Center](#)<sup>vi</sup> (325-942-2911).

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, discussion/journal posts, exams, and group projects are due on Sunday @11:59pm of the week listed, unless otherwise stated in the schedule at the end of this syllabus.

There are readings which you will have to complete to be able to participate in individual assignments, discussion/journal posts, and discussions. To complete this course successfully, it is advised that you participate in all course activities. Students who complete all of the reading, assignments, discussion/journal posts, group project, and exams are much more likely to do well in the course.

For planning purposes, this class will probably require about 6-9 hours of work per week on average.

## **COMMUNICATION**

I will generally respond to email messages within a few hours. However, on occasion I have things going on in my life that prevent a rapid reply. In those situations I will respond to emails within 48 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Most of my communication to you will be through announcements on Blackboard. I prefer to communicate through announcements so that there is a record of my communication that can be found easily and won't get eaten by the spam monster. However, if it is a sensitive matter or simply does not pertain to the entire course I will email using your ASU email account.

## **LIFE HAPPENS CLAUSE**

Life happens to all of us. Despite our best efforts, some days nothing seems to go right. Your car breaks down on the way to school, you run out of the house without something and have to go back despite the fact that you were already running late, your boss calls you into work, or your child is sick and you have to go pick them up from daycare/school. Or, you get so overwhelmed that everything seems too much to deal with.

If this happens to you, please email me. We will figure out what to do to keep you on track in the course. Whether that means extra tutoring sessions, deadline extensions, or something else. Please don't suffer in silence. I want to help out, you just need to let me know what is going on.

**STUDENT LEARNING OBJECTIVES**

Learning outcomes will be evaluated by online discussions, journals, exams, and a group project.

<p>Student Learning Outcomes By completing this course, the student should be able to:</p>	<p>Assignment(s) or activity(ies) validating outcome achievement:</p>
<p>Describe the structure of the Earth and the materials it is made of.</p>	<p>Earth’s Interior, Atoms to Molecules, States of Matter, Igneous Rocks, Sedimentary Rocks, Metamorphic Rocks Chapters; Structure of the Earth, Continental Drift, and Plate Tectonics, Minerals, Igneous Rocks, Sedimentary Rocks, Metamorphic Rocks Assignments; Module I Exam</p>
<p>Explain how humans use energy resources in our daily lives, and how these resources form.</p>	<p>The Government and Energy Resources Discussion; Energy Resources Assignment; Module III Exam</p>
<p>Describe how plate tectonics shapes the Earth.</p>	<p>Plate Tectonics, Tectonic Stress and Geologic Structures, Mountain Formation, Volcanoes, Volcanic Activity, Types of Volcanoes, and Volcanic Eruptions, and Earthquakes Chapters; Structure of the Earth, Continental Drift, and Plate Tectonics, Mountain Building &amp; Geologic Time, Volcanoes &amp; Earthquakes Assignments; Module I Exam and Module II Exam</p>
<p>Place geologic events in order using the geologic principles and correlate layers on a regional scale.</p>	<p>Relative Ages of Rocks, Absolute Ages of Rocks, and Geologic Time Scale Chapters; Mountain Building &amp; Geologic Time Assignments</p>
<p>Describe how water moves around the Earth.</p>	<p>Earth's Fresh Water, Streams and Rivers, Groundwater, Water Resources, Floods, Wetlands, Introduction to the Oceans, Composition of Ocean Water, The Seafloor, Ocean Currents, Oceans and Coastal Environments, Tides, Currents, Waves and Coastal Features, and Thermohaline circulation Chapters; Water Resources in Texas Journal, Beach Erosion Discussion; Hydrologic Cycle, Streams, and Groundwater, and Oceans Assignments; Module III Exam</p>
<p>Explain the fundamental processes that create weather and control climate.</p>	<p>The Atmosphere, Weather Processes and Systems, Climate Systems and Change, Climate and Weather, and Global Climate Change Chapters; The Atmosphere, Weather, and Climate Assignments; Evaluating news articles about climate change and wildfires Discussion; Group Activity: Weather Observations; Module IV Exam</p>
<p>Describe how the universe and solar system were formed and their current structure.</p>	<p>The Universe, Stars, The Sun, The Sun and the Earth-Moon System, Sun - Earth Relationship: The Seasons, Introduction to the Solar System, Inner Planets, Outer Planets, and Other Objects in the Solar System Chapters; The Universe and our Solar System Assignment; Module V Exam</p>

## GRADING

Number of Items	Name of item	Percent of grade per item	Number of Item Dropped	Total percent of grade
8	Discussion/Journal Posts	3% each	Lowest 1	21%
14	TopHat Homework assignments	4% each	Lowest 2	48%
1	Group project	11% each	None	11%
5	Exams	5% each	Lowest 1	20%

## GRADING SYSTEM

Grade Range	Letter Grade
100-90%	A
89-80%	B
79-70%	C
69-60%	D
59-0%	F

## EXAMS AND RESPONDUS LOCKDOWN BROWSER AND RESPONDUS MONITOR

During the semester there will be five (5) online exams in BlackBoard. The deadlines for these tests are on BlackBoard and in the course schedule at the end of this document. Access to Exams will be through Respondus™ Lockdown Browser and will be video recorded via Respondus™ Monitor (which requires a webcam). You will need to install Respondus Lockdown Browser and Respondus Monitor and learn how to use them before the exam. You can find information on where to find and how to install both of these tools in the 'Help and Info about the class' section in Blackboard. If you have any problems contact the ASU IT Service Center (325-942-2911).

If you lose power or connection during an exam, please contact me so we can resolve the issue.

I appreciate your adherence to the following list as it applies to all exams given in the course:

- Exams are closed note, please leave your notes, textbook, assignments, etc. somewhere you cannot use them during the exam.
- You can not use your notes, the book, another person, or any online search engine or website to look up the answers to the questions while taking the exam.
- You must complete your exam using Respondus™ Lockdown Browser and will be video recorded via Respondus™ Monitor using a webcam. Only I can see these videos and I only check them if the software flags something.
- You need to be in the video frame during the test time as best as you can. If you are not the software will continue to annoy you during your exam and will flag the video for me to review.
- Please do not purposely cover the webcam during the exam, violation of this will be considered cheating. If you cover the webcam during the exam you will receive a grade of 0 for the exam.
- If you are seen asking someone else for answers or looking up information during the exam it will be considered cheating and you will receive a grade of 0 for the exam.
- If there is any other type of suspicious activity observed while you are taking your exam it may be considered cheating.
- If a student receives more than one (1) failing grade for cheating on an exam they will be referred to the appropriate office for said violations.

## TOPHAT ASSIGNMENTS

We will be using Top Hat for class assignments. Reading assignments and videos to watch are included with each assignment, along with a set of questions to answer. If you already have a Top Hat account, go directly to the [TopHat course](#)<sup>vii</sup>.

If you are new to Top Hat, follow the link in the email invitation you received or follow these steps:

1. Go to the [Registration Page](#)<sup>viii</sup>
2. Click "Search by school" and input the name of our school
3. Search for our course with the following join code: 465761 (NOTE: This is a different join code that for the lab section and you will need to add both if you are also taking the lab)

For instructions on how to create a Top Hat account and enroll in our Top Hat course, please refer to [Top Hat's Getting Started Guide](#)<sup>ix</sup> OR [2 minute video walkthrough](#)<sup>x</sup>.

Should you require assistance with Top Hat at any time please contact their Support Team directly by way of email ([support@tophat.com](mailto:support@tophat.com)), the in-app support button, or by calling 1-888-663-5491. Specific user information may be required by their technical support team when troubleshooting issues.

## DISCUSSION POSTS

In this course you will have 6 (six) discussion posts to complete. It is important to be learn how to have respectful discussions with people that we both agree and disagree with. Hearing other people's stories, experiences, and perspectives helps us to better understand the world around us. Having a diversity of thought is one of the most important skills we can have as proactive members of the world. Problems are solved when people from a wide variety of background and cultures get together to share ideas. In the discussion posts in this class, it is my intent that you have a safe space to practice having respectful discussions with people you may not know, who may have different views to you.

For each discussion you will need to make your initial post regarding the question(s) I have posed and then read and respond to at least 3 (three) other posts by your fellow classmates. Try to avoid simply saying you agree or disagree and try to elaborate on what about the person's post really interested you.

While I expect and encourage folks to disagree with each other, I absolutely expect you to remain respectful in your interactions. Being ugly to someone will result in a grade of a 0 (zero) for the discussion post. If the behavior happens a second time, the person being disrespectful will be reported to the Behavioral Intervention Team (BIT).

Below is a list of helpful guidelines for using good 'netiquette' in your communications:

- 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. It is important for all of us to learn to listen and respond to each other with respect, no matter if we agree or not. I will not tolerate the abuse of anyone, for any reason.
- Cite all quotes, references, and sources. When in doubt, cite it.

- 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).

(The "netiquette" guidelines were adapted from Arlene H. Rinald's article, The Net User Guidelines and Netiquette, Florida Atlantic University, 1994, available from Netcom.)

### **JOURNAL POSTS**

In this course you will complete 3 (three) Journal Posts that require you to use internet resources (some provided, some you will need to find yourself) to research a certain topic or question posed. These can be submitted by writing up your post in a word document (or similar program) or by typing your answer into the submission area in Blackboard. Whichever way you choose to submit your journal post be sure to include your references. Make sure to answer all the questions posed.

### **GROUP PROJECT**

You will have 1 (one) group project to complete in this course. Group work is always frustrating, particularly when the group has to meet virtually or work together via email or other electronic means. I have discovered that I often have to work in groups, and since COVID much of that is via virtual meetings or emails. There will most likely be someone that drops the ball, or never shows up to the meetings, or never responds to emails. To help alleviate some of that frustration I have tried to design a project that is flexible enough that you can complete it even if one or more members of the group do not complete their part. With that said, please email me if you are having issues getting group members to respond. I will do my best to help.

### **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. All assignments, discussions, journals, wikis, group activities, and exams are open and available from the beginning of the year until each respective due date. Late assignments are only accepted with approval from me.

### **COPYRIGHT POLICY**

Students officially enrolled in this course are allowed to make one printed copy of the given articles and/or chapters. Please do not distribute or reproduce any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

### **COURSE EVALUATION**

Students are provided the opportunity and are strongly encouraged to participate in a course evaluation at the end of the semester. I actually read these and use them to adjust my future courses.

### **GEOLOGIC EXHIBITION ORGANIZATION (GEO)**

GEO, the student organization of all interested in geology (not just majors/minors), meets almost every Wednesday @ Noon. GEO is a student chapter of the American Association of Petroleum Geologists ([AAPG<sup>xi</sup>](#)) and Sigma Gamma Epsilon, the national honor society of the earth sciences.

### **YOU CAN MAJOR OR MINOR IN GEOLOGY @ ASU!**

Good and rewarding [careers<sup>xii</sup>](#) exist for geologists, geophysicists, hydrogeologists, secondary science teachers, and petroleum engineers. See the BS in [Geoscience requirements<sup>xiii</sup>](#). A Geology Minor requires 18 hours of geology courses.

## **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](#)<sup>xiv</sup>
- [Angelo State University Catalog](#)<sup>xv</sup>

## **ACADEMIC INTEGRITY**

As members of this university community, we are all expected to maintain honesty and integrity in our work. If a student is found guilty of any form of dishonesty in academic work they may be subject to disciplinary action and possible expulsion from ASU.

To get more information about how to maintain honesty in your work see the university's [Statement of Academic Integrity](#).<sup>xvi</sup> If you are still unsure or have any questions, please come see me.

## **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.

If you believe that you are entitled to reasonable accommodation, you may do so by contacting the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at [ADA@angelo.edu](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#).<sup>xvii</sup> 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](mailto: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 me 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](#)<sup>xviii</sup> for more information.

## **PLAGIARISM**

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. Copying material word-for-word into a piece of writing without quotation marks and the source of the quotation is plagiarism.

The vast majority of students that have plagiarized, didn't intend to. Instead, they were uninformed or misinformed about what constitutes plagiarism. To avoid a mistakes like this check out the [ASU Writing Center](#)<sup>xxix</sup> or ASU's [Academic Integrity policy](#)<sup>xx</sup> in the Student Handbook.

The best way to avoid plagiarism is to paraphrase (re-write) information in your own words. Ne way to paraphrase is by taking bulleted notes while doing your research and then using only those notes during the writing process. You can find other tips by searching the internet or talking to me.

### **STUDENT ABSENCE FOR OBSERVANCE OF RELIGIOUS HOLY DAYS**

If you intend to observe a religious holy day that will take you away from class please let me know, preferable before the absence. This allows us to come up with a plan to complete the missed work. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)<sup>xxi</sup> for more information.

### **TITLE IX AT ANGELO STATE UNIVERSITY**

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex. You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: [Incident Reporting Form](#)<sup>xxii</sup>

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: [michelle.miller@angelo.edu](mailto:michelle.miller@angelo.edu)

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the [University Counseling Center](#)<sup>xxiii</sup> (325-942-2371), the [24-Hour Crisis Helpline](#)<sup>xxiv</sup> (325-486-6345), or the [University Health Clinic](#)<sup>xxv</sup> (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#)<sup>xxvi</sup>.

### **INFORMATION ABOUT COVID-19**

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)<sup>xxvii</sup> web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

### **MODIFICATIONS TO THE SYLLABUS**

Despite my best planning, sometimes things don't go according to plan. In those cases I may need to modify this syllabus, including grade evaluation and course schedule. If it becomes necessary for me to



modify the syllabus in any way I will post an updated version on our course in Blackboard and post an announcement to advise of the changes.

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- i <https://courses.lumenlearning.com/earthscience/>
  - ii <https://tophat.com/>
  - iii <https://www.angelo.edu/current-students/freshman-college/academic-tutoring.php>
  - iv <https://www.angelo.edu/administrative-support/information-technology/>
  - v <https://angelo.blackboard.edu/>
  - vi <https://www.angelo.edu/administrative-support/information-technology/>
  - vii <https://app.tophat.com/e/465761>
  - viii <https://app.tophat.com/register/student>
  - ix <https://bit.ly/31TGMLw>
  - x <https://youtu.be/NNmVJWGu4iA>
  - xi <http://www.aapg.org>
  - xii [http://www.angelo.edu/dept/physics/Geosciences/geoscience\\_careers.php](http://www.angelo.edu/dept/physics/Geosciences/geoscience_careers.php)
  - xiii <https://www.angelo.edu/academics/programs/geoscience/>
  - xiv <https://www.angelo.edu/current-students/student-handbook/>
  - xv <https://www.angelo.edu/academics/catalog/>
  - xvi <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>
  - xvii <https://www.angelo.edu/current-students/disability-services/>
  - xviii <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>
  - xix [https://www.angelo.edu/current-students/writing-center/academic\\_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)
  - xx <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>
  - xxi <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>
  - xxii <https://www.angelo.edu/incident-form>
  - xxiii <https://www.angelo.edu/current-students/counseling-services/>
  - xxiv <https://www.angelo.edu/current-students/counseling-services/crisishelpline.php>
  - xxv <https://www.angelo.edu/current-students/health-clinic/>
  - xxvi <https://www.angelo.edu/title-ix>
  - xxvii <https://www.angelo.edu/covid-19/>

**SCHEDULE:** All information is subject to change.

Week #	Week of	Module	Topic for the Week	Textbook Reading	Exams	Discussion/Journal/Group Project	TopHat Homework
1	<b>No Class January 17</b> January 18-23	Welcome Module	Welcome Module			Memorable Geologic Event (Discussion)	
2	January 24-30	Module I: Earth Structure and Materials	Earth Structure, Continental Drift and Plate Tectonics	Earth's Interior, Plate Tectonics			Structure of the Earth, Continental Drift, and Plate Tectonics
3	January 31 – February 6	Module I: Earth Structure and Materials	Minerals	Atoms to Molecules, States of Matter		Mineral Uses (Discussion)	Minerals
4	February 7-13	Module I: Earth Structure and Materials	Igneous Rocks	Igneous Rocks			Igneous Rocks
5	February 14-20	Module I: Earth Structure and Materials	Sedimentary Rocks	Sedimentary Rocks			Sedimentary Rocks
6	February 21-27	Module I: Earth Structure and Materials	Metamorphic Rocks	Metamorphic Rocks	<b>Module I Exam</b>	Rocks I Found (Journal)	Metamorphic Rocks
7	February 28 – March 6	Module II: Earth Hazards and Geologic Time	Mountain Building and Geologic Time	Tectonic Stress and Geologic Structures, Mountain Formation, Relative Ages of Rocks, Absolute Ages of Rocks, and Geologic Time Scale			Mountain Building & Geologic Time
8	March 7-13	Module II: Earth Hazards and Geologic Time	Volcanoes and Earthquakes	Volcanoes, Volcanic Activity, Types of Volcanoes, and Volcanic Eruptions, and Earthquakes	<b>Module II Exam</b>	Mitigating Hazards (Journal)	Volcanoes & Earthquakes
9	March 14-20	<b>SPRING BREAK!</b>					
10	March 21-27	Module III: Energy Resources and the Hydrologic Cycle	Energy Resources	Energy Resources, Non-renewable Energy Resources, Renewable Energy Resources		The Government and Energy Resources (Discussion)	Energy Resources
11	March 28 – April 3	Module III: Energy Resources and the Hydrologic Cycle	Streams and Groundwater	Earth's Fresh Water, Streams and Rivers, Groundwater, Water Resources, Floods, Wetlands		Water Resources in Texas (Journal)	Hydrologic Cycle, Streams, and Groundwater
12	April 4-10	Module III: Energy Resources and the Hydrologic Cycle	Oceans	Introduction to the Oceans, Composition of Ocean Water, The Seafloor, Ocean Currents, Oceans and Coastal Environments, Tides, Currents, Waves and Coastal Features, and Thermohaline circulation	<b>Module III Exam</b>	Beach Erosion (Discussion)	Oceans
13	April 11-17	Module IV: Weather and Climate	Heating the Atmosphere and Weather Phenomena	The Atmosphere		Group Activity: Weather Observations (Due April 24)	The Atmosphere
14	April 18-24	Module IV: Weather and Climate	Weather	Weather Processes and Systems		Group Activity: Weather Observations (Due April 24)	Weather
15	April 25 – May 1	Module IV: Weather and Climate	Climate	Climate Systems and Change, Climate and Weather, and Global Climate Change	<b>Module IV Exam</b>	Evaluating news articles about climate change and wildfires (Discussion)	Climate
16	May 2-8	Module V: The Universe and the Solar System	The Structure of the Universe and our Solar System	The Universe, Stars, The Sun, The Sun and the Earth-Moon System, Sun - Earth Relationship: The Seasons, Introduction to the Solar System, Inner Planets, Outer Planets, and Other Objects in the Solar System	<b>Module V Exam</b>	Should Pluto be let back in? (Discussion)	The Universe and our Solar System