Lecture  T/R 6:00-7:15 pm  Room: Admin Bldg. 136

Instructor: Autumn Thompson
Email: athompson@uaptc.edu

Lab  T 4:00-5:50 pm  Room: Science Bldg. 104

Cellphone: 949-584-3861  (call or text)

Chair: Mr. Thomas Russell  trussell@uaptc.edu  501-812-2705
Dean: Dr. Marico B. Howe  mbryanthowe@uaptc.edu  501-812-2342

*All emails will receive a response within 24-48 hours. If you do not receive a response, the appropriate chain of command is above.

ISBN 9780134543536, Pearson Education

Lab Manual: Applications and Investigations in Earth Science (9th ed.) by Tarbuck and Lutgens
ISBN 9780134746241, Pearson Education

Catalog Description
This course is an introduction to the basic concepts of Earth sciences. Topics of study include Earth structure and processes; earthquakes, volcanism, glacial formations, plate tectonics, weathering, and erosion; the atmosphere, climate, and weather; oceans; rocks, minerals, and fossils; history of the Earth; and the scientific method. This course is not appropriate for transfer for STEM majors (such as Science, Technology, Engineering, and Mathematics and other related majors). This is not acceptable for courses requiring Physical Science as a prerequisite. See prerequisite details below. 3 lecture hours, 2 lab hours. (4 credit hours/special course fee) Prerequisite: (must meet one of the following requirements) • A score of 22 or above on the Math section of the ACT • A score of 97 or above on the Accuplacer Elementary Algebra test • A score of 50 or above on the COMPASS Math Placement test • MATH 1300 with a grade of “C” or better • Completion of all required zero (0) level mathematics coursework

Student Learning / Course Outcomes

ACTS
Expected Student Learning Outcomes: The student will be able to explain, describe, discuss, recognize, and/or apply knowledge and understanding of the following topics:

1. Earth structure and processes
2. Earthquakes, volcanism, glacial formations, plate tectonics, weathering, and erosion
3. Atmosphere, climate, and weather
4. Oceans
5. Rocks, minerals, and fossils
6. History of the Earth
7. Scientific method/inquiry

Department Attendance Policy
Agencies granting financial assistance may be notified of the violation of the attendance policy by students receiving financial aid.
Attendance is taken starting the first day of the semester, with the exception of students who enroll after classes have started. Instructors have the right to count students as absent if they arrive late to class, leave class early, or go in and out of the classroom during class time. Instructors have the right to lower a student’s grade based on excessive absences.

You will be given a failing grade (F) for the course if you miss more than 25% of lab sessions regardless of your overall grade. You will be given a failing grade (F) for the course if you miss more than 25 % of lecture sessions regardless of your overall grade.

Any student who does not attend within the first two weeks of class will be considered a “no show” according to the campus attendance policy and will be reported as such and dropped from the class.

Instructors have the right to enforce UA-PTC’s administrative drop policy for days of consecutive nonattendance. Such particulars as determined by the instructor are detailed in the paragraph below.

**Attendance Artifact Policy**
Attendance and Participation are both required for this class and are tracked using daily sign-in sheets. Agencies granting financial assistance may be notified of violations of the attendance policy by students receiving financial aid.

In an online class, eligibility for Financial Aid is based on student participation. Logging into the course does not constitute participation. For purposes of roster certification, students must complete a gradable attendance artifact.

**Course Policies**
The UA-PTC Catalogue rules and regulations will be enforced in this course at all times.

Please consult the following website for more information: [https://www.uaptc.edu/catalog](https://www.uaptc.edu/catalog)

Professional behavior is required. Punctual attendance and intelligent participation are expected. Appropriate behavior is expected for all communications, including any notes, email messages, or telephone conversations.

**Course Requirements and Grading Scale:**

* Announcements and class materials may be posted on Blackboard. You must be able to access both Blackboard and your school email account, and you should check them on a regular basis.

Your final grade will be based on the following:

**Exams:** There will be 4 lecture exams worth 100 points each. The lowest score of the 4 hourly exams will be dropped. A study guide will be given to you before each exam—this is meant to help you organize your notes and review topics discussed in lecture and lab.

**Final Exam:** The final exam is worth 150 points—you will not be allowed to drop this grade. The final exam is cumulative.

**Lab Exercises:** There will be 14 lab exercises worth 25 points each. The two lowest lab grades will be dropped. You may work in groups, however each student is responsible for turning in their own data sheets at the end of a lab session.

**Research Paper:** Write a 4-page research paper based on a topic relating to Earth Science (instructor approved). It must have four academic sources with at least one each from print, electronic and periodical media. The paper must be submitted to the instructor as a hard copy. Please write your own words throughout the paper. Plagiarism is a serious, specific violation of UA-PTC’s Academic Integrity Policy; dealt with per the Student Handbook.
Keep all quotes minimal (one sentence) and explain them in the paragraph containing them:

The guidelines for the paper are:
1. Times New Roman
2. 12-point size
3. Double-spaced

References must be listed on a separate, final 4th page of the report.

Class Participation: The class participation grade will be based on attendance, class discussions, and handout questions.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Hourly Exams (3 out of 4)</td>
<td>300</td>
<td>A</td>
</tr>
<tr>
<td>Final Exam</td>
<td>150</td>
<td>B</td>
</tr>
<tr>
<td>Lab Exercises (12 out of 14)</td>
<td>300</td>
<td>C</td>
</tr>
<tr>
<td>Research Paper</td>
<td>75</td>
<td>D</td>
</tr>
<tr>
<td>Class Participation</td>
<td>50</td>
<td>F</td>
</tr>
</tbody>
</table>

Total: 875 points

Course Content: The tentative weekly schedule is provided on the following pages. Please keep in mind that modifications to this schedule may occur as we proceed through the semester. Any modifications will be announced during lecture. It is the responsibility of the student to stay informed of any changes.

IMPORTANT!!!!
Policy on Missed Material: The lowest grade for one exam and two labs will be dropped. You will not have the opportunity to make up missed exams, lab exercises, or lecture participation exercises. Any additional missed exams or assignments will result in a grade of zero for that material.

UA-PTC Institutional Statements and Policies

Mission Statement
University of Arkansas – Pulaski Technical College provides access to high-quality education that promotes student learning and enables individuals to develop to their fullest potential.

Institutional Learning Outcomes and General Education
UA-PTC supports a college-wide institutional learning assessment program which concerns effective instructional methods and promotes student learning achievement by assessing:

1. Communication
2. Critical Thinking
3. Cultural Awareness
4. Information Literacy
5. Professionalism
6. Quantitative Literacy
7. Technology Literacy

For more information, please consult the following website: https://uaptc.edu/sla/learning-outcomes/student-learning-outcomes
Department / Program Learning Outcomes
The Physical Science department, consistent with the College’s mission and the Division’s objectives, encourages the success of its students in the health related fields and academic disciplines emphasizing Critical Thinking and Quantitative Literacy by the following program outcomes:

1. Critical and investigative thought
2. Academic Integrity
3. Independent thinking and learning
4. Written communication on a collegiate level
5. Exposure to natural science, human health, and nutrition.
6. Recognition of the influence of scientific thought on individuals and society
7. Collaborative investigation
8. Basic mastery of scientific concepts and the demonstration of scientific skills
9. Correct use of instrumentation and proper laboratory techniques

Information Literacy
UA-PTC is committed to the Information Literacy Competency Standards for Higher Education as established by the Association of College and Research Libraries and endorsed by the National Forum on Information Literacy. Therefore, all courses will incorporate an information literacy component so that, by graduation, all students will be able to recognize the need for information, then locate, evaluate, synthesize, and communicate information in an ethical manner. Information literacy encompasses critical thinking, research, media, technology, health, business, and visual literacy skills to produce lifelong learners who can make informed decisions in the workplace and in their personal lives.

UA-PTC Attendance Policy
Education at UA-PTC requires students’ active involvement in the learning process. Thus, students are expected to attend all classes and actively engage in all learning assignments and/or opportunities provided in their classes. Class attendance should be treated as mandatory by all students as attendance will be taken by all instructors during the first two weeks of class. Additionally, a written policy on student attendance that is tied to course objectives and included in a course syllabus will be provided for each course by instructors.

Course Evaluations
Students may be asked to evaluate their instructor and course near the end of the semester. These student evaluations are very important to the improvement in the quality of instruction and course materials. All results are anonymous and shared with the faculty only after the semester is over and grades have been posted.

Academic Integrity
It is expected that all students who attend UA-PTC conduct themselves in a manner appropriate for the college experience. Academic integrity is a vital component of collegiate behavior. The UA-PTC catalogue states, “The gaining of knowledge and the practice of honesty go hand-in-hand.”

The catalogue also states, “The responsibility and authority of initiating discipline arising from violations of the rules against dishonesty during the process of the course are vested in the instructor of that course.”

The complete Academic Integrity Policy is in the UA-PTC code of conduct.
Plagiarism
According to the Merriam-Webster dictionary, plagiarism is defined as, “the act of using another person's words or ideas without giving credit to that person”. It is a serious offense and will not be tolerated. A good reference for recognizing and avoiding plagiarism is listed below. Please click on the link after you have downloaded this syllabus and ensure you review the information provided:
http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml#strategies

If plagiarism is found in your writings for this course, that assignment will be given a zero grade.

Accommodation Policy
Services for Students with Disabilities: UA-PTC is committed to fulfilling all federal requirements as stated in the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the American with Disabilities Amendments Act (ADAAA) of 2008. accommodations are available to students who have documented disabilities. Students who request accommodations must register with the Disability Services Office (Main Campus: 501-812-2738 or South Campus: 501-812-2862) and must provide current and relevant documentation.

Students requesting accommodations should inform the instructor at the beginning of the course or as soon as accommodations are approved. It is the student's responsibility to provide their Accommodation Letter to the instructor. Accommodations are not retroactive and will only be provided once your instructor receives the Accommodation Letter.

Student Code of Conduct
All students are expected to abide by the UA-PTC Student Code of Conduct. For the full Student Code of Conduct, access the most current version of the UA-PTC Academic Catalog.
http://uaptc.azurewebsites.net/docs/default-source/course-catalog/2017-18-academic-catalog.pdf?sfvrsn=a08a3038_2

Sexual Misconduct
No person at Pulaski Technical College will, on the basis of gender, be excluded from participation in, be denied benefits of, or be subjected to sex discrimination, sexual harassment or sexual misconduct under any education program or activity. All college administrative policies and procedures regarding sex discrimination, sexual harassment, and sexual misconduct are in compliance with Title IX. Students who feel they are victims of sexual misconduct should contact the UA-PTC Title IX Deputy Coordinator for Students:

Michelle Anderson, Director of Student Life and Leadership
Campus Center Building Room 216
501-812-2756
manderson@uaptc.edu

Report a Complaint or Concern
UA-PTC takes very seriously complaints and concerns regarding the institution. Most complaints or concerns of a specific nature should be initiated and resolved at the campus level through normal college processes whenever possible. UA - Pulaski Technical College receives and resolves complaints using a variety of methods. To report a complaint or concern, please follow the link: https://www.uaptc.edu/report-a-concern-complaint
<table>
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<tr>
<th>Date</th>
<th>Lecture Topics &amp; Lab Exercises</th>
<th>Chapter</th>
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| 1/10         | NO LAB  
Introduction to Earth Science                                   | 1       |
| 1/15-1/17    | Lab Session 1: Metric System and Measurement (24)  
Matter and Minerals                                                 | 2       |
| 1/22-1/24    | Lab Session 2: The Study of Minerals (1)  
Rocks: Materials of the Solid Earth                                 | 3       |
| 1/29-1/31    | Lab Session 3: Rock Cycle & Igneous Rocks (2)  
Rocks: Materials of the Solid Earth (cont.)  
**EXAM 1 Thursday, January 31**                                     | 3       |
| 2/5-2/7      | Lab Session 4: Sedimentary & Metamorphic Rocks (2)  
Plate Tectonics: A Scientific Revolution Unfolds                    | 4       |
| 2/12-2/14    | Lab Session 5: Plate Tectonics (3)  
Earthquakes and Earth’s Interior  
Volcanoes and Other Igneous Activity                                | 5       |
| 2/19-2/21    | Lab Session 6: Earthquakes and Earth’s Interior (4)  
Volcanoes and Other Igneous Activity (cont.)  
Crustal Deformation and Mountain Building                           | 6       |
| 2/26-2/28    | Lab Session 7: Volcanism and Volcanic Hazards (5)  
Crustal Deformation and Mountain Building (cont.)  
**EXAM 2 Thursday, February 28**                                     | 7       |
| 3/5-3/7      | Lab Session 8: Aerial Photos and Topo Maps (7)  
Weathering, Soil, and Mass Movement  
Running Water and Groundwater                                         | 8       |
| 3/12-3/14    | Lab Session 9: Running Water and Groundwater (8)  
Running Water and Groundwater (cont.)  
The Ocean Floor                                                        | 9       |
| 3/19-3/21    | No Class—Spring Break!!                                               |         |
| 3/26-3/28    | Lab Session 10: Introduction to Oceanography (11)  
Ocean Water and Ocean Life  
The Dynamic Ocean  
**EXAM 3 Thursday, March 28**                                         | 14      |
| 4/2-4/4      | Lab Session 11: Waves, Currents, and Tides (12)  
Geologic Time  
Earth’s Evolution Through Geologic Time                               | 11      |
| 4/9-4/11     | Lab Session 12: Geologic Time (10)  
Earth’s Evolution Through Geologic Time (cont.)  
Origins of Modern Astronomy  
Touring Our Solar System                                               | 12  |
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<tr>
<td>4/16-4/18</td>
<td>Lab Session 13: Examining the Terrestrial Planets (21)</td>
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<td>Touring Our Solar System (cont.)</td>
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<td>EXAM 4 Thursday, April 18</td>
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<td>4/23-4/24</td>
<td>Lab Session 14: Heating the Atmosphere (14)</td>
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<td>The Atmosphere: Composition, Structure, &amp; Temp.</td>
<td>17</td>
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<td>Moisture, Clouds, and Precipitation</td>
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<td></td>
<td>Weather Patterns and Severe Storms</td>
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<td>4/30-5/2</td>
<td>NO LAB</td>
<td>19</td>
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<td>Weather Patterns and Severe Storms (cont.)</td>
<td>20</td>
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<td>World Climates and Global Climate Change</td>
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**FINAL EXAM Thursday, May 9 6:30 pm – 8:30 pm**

*Please keep in mind that modifications to this schedule may occur as we proceed through the semester. Any modifications will be announced during lecture. It is the responsibility of the student to stay informed of any changes. Dates of exam WILL NOT change.*

**IMPORTANT NOTES FOR LAB:**

- Come to lab prepared. You should have read through the chapter and lab material before we begin lab for the day. Make note of any additional materials that you will need that day (calculator, lecture notes, etc.) Being prepared means that you will have more time to work in lab and might also allow you to finish early!

- Lab exercises should be completed in class and are due before you leave class for the day. Labs turned in late will not be accepted, and you will receive a grade of zero for the lab exercise.

- You should bring the following to lab each time:
  - Lab Manual
  - Calculator (for simple math problems)
  - Pencil and good eraser
  - Notebook paper
  - Lecture Textbook
  - Lecture notes