South Plains College
Course Syllabus
Earth Science 1 GEOL 1401

Instructor Information
Instructor: Aaron Greene Office Location: S184
E-mail: agreene@southplainscollege.edu
Phone: 806-716-2970

Required Course Materials: Computer with internet access, microphone and camera

Purpose Statement
Survey of Astronomy, Meteorology, Oceanography, and Geology

Prerequisites
No previous college-level courses are required.

Course Description
Introductory course, overviewing the components and processes of four major disciplines. Geological processes and structures will be defined. Meteorological data and processes will be recorded and observed. Oceanographic formations and mapping will be examined. Finally, Astronomical exploration and formation will be delineated over time from the human perspective on earth.

A schedule will be provided on Blackboard. Remember, all **due dates are subject to change**. Regularly check course announcements on Blackboard for scheduling changes.

1. **Course Structure:**
    a. **Astronomy**
    b. **Meteorology**
    c. **Oceanography**
    d. **Geology**

2. Online Lecture and Lab will be conducted through the SPC Blackboard platform.
3. **GEOL 1403 earns 4 credit hours**
4. Students will develop proficiency in the appropriate Intellectual Competencies as follows:
    - **Reading:** The ability to analyze and interpret a variety of printed materials, books, documents and articles – above the 12th grade level.
    - **Writing:** The ability to produce clear, correct and coherent prose adapted to purpose, occasion and audience – above the 12th grade level.
    - **Listening:** The ability to analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, reading – above 12th grade level.
    - **Critical Thinking:** The ability to INDIVIDUALLY think and analyze at a critical level.
    - **Computer Literacy:** The ability to understand our technological society, use computer-based technology in communications, solving problems, acquiring information. Use of PowerPoint, Word, Excel, and other software within the Blackboard platform.

Course Objectives and Student Learning Outcomes
Upon completion of the course, the student will show competence in the course objectives listed below:

Lab Learning Outcomes:

- Classify rocks and minerals based on chemical composition, physical properties, and origin.
- Apply knowledge of topographic maps, diagrams, and/or photographs to identify landforms and explain the processes that created them.
- Differentiate the types of plate boundaries, explain the processes that occur at each and identify associated structural features on maps, block diagrams and cross sections.
- Apply relative and numerical age-dating techniques to construct geologic histories.
- Measure atmospheric processes that affect weather and climate.
- Describe the composition and motion of ocean water and analyze the factors controlling both.
- Compare properties and motions of objects in the solar system.
- Demonstrate the collection, analysis, and reporting of data.

Lecture Learning Outcomes:

- Explain the current theories concerning the origin of the Universe and of the Solar System.
- Explain the place of Earth in the Solar System and its relationships with other objects in the Solar System.
- Relate the origin and evolution of Earth's internal structures to its resulting geologic systems, including Earth materials and plate tectonic activities.
- Explain the operation of Earth's geologic systems and the interactions among the atmosphere, the geosphere, and the hydrosphere, including meteorology and oceanography.
- Explain the history of the Earth including the evolution of earth systems and life forms.

Course Requirements

1. The student is required to do the following:
    - Read the assigned reading materials
    - Watch all online video content on Blackboard.
    - Take notes over online lectures.
    - Participate in online discussions.
    - Participate in class activities offered online
    - Complete reading material and homework in a timely manner.
    - View audiovisual materials on selected topics.
    - Use computer software as directed.
    - Complete the assignments and assessments on the assigned dates

Outcomes Inventory
Assessment questions will be inserted into assignments throughout the course to determine the mastery of course learning objectives; given at the discretion of the instructor.

Syllabus Statement:

https://www.southplainscollege.edu/syllabusstatements/

Calendar / Schedule
The instructor will ensure that the course content is covered in a manner that fulfils the course objectives. Due dates for assignments, quizzes and exams will be provided within a calendar format. All dates will be **tentative and subject to change**. For instance, if Blackboard or the school servers go down, I may change due dates.

Attendance Policy

ATTENDANCE: Attendance is determined in an online class by completing tasks, assignments, quizzes and exams by the due dates. Exceptions are only made in cases of extreme hardship or loss. Proof of attendance at a funeral or extreme illness will be required at the discretion of the instructor. Late work will rarely be accepted by the professor.

Instructor Initiated Drop

- Students are rarely dropped, but it can happen. A student may be dropped for inappropriate behavior and or language in online assignments. Rudeness and other negative behaviors will not be tolerated. Only one warning will be given by the instructor, but no warning must be given in extreme cases. The decision to drop a student is at the discretion of the instructor.
- Violations of the Student Code of Conduct Guide may also be a basis for a student being dropped. Plagiarism or other violations of academic integrity can result in an instructor initiated drop. All student work should represent quality, individual student thought.