GEOL1401 Syllabus
Eastfield College

Instructor Information
Name: Shizuko Watanabe
DCCCD Email: zuwatanabe@dcccd.edu
Office Phone: 972-391-1068
Office Location: C286
Office Hours: TBA. Individual assistance is always available.
Division Office and Phone: STEM 972-860-7297

Course Information
Course Title: Earth Sciences for Non-Science Majors I
Course Number: GEOL1401
Section Number: 49480
Semester/Year: Spring
Credit Hours: 4
Class Meeting Time/Location: Lec Online
Lab MW 12:30 pm - 3:20 pm C321
Certification Date: 01/27/2020
Last Day to Withdraw: 02/26/2020

Course Prerequisites
One of the following must be met: (1) Developmental Reading 0093 or (2) English as a Second Language (ESOL) 0044 or (3) have met the Texas Success Initiative (TSI) Reading standard.

Course Description
This course is for the non-science major. It is an introductory survey of physical geology, historical geology, oceanography, meteorology, and astronomy. It relates the interaction of the earth sciences to the physical world. (3 Lec., 3 Lab.) Coordinating Board Academic Approval Number 4006015103
Student Learning Outcomes

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

Laboratory
6. Classify rocks and minerals based on chemical composition, physical properties, and origin.
7. Apply knowledge of topographic maps, diagrams, and/or photographs to identify landforms and explain the processes that created them.
8. 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.
9. Apply relative and numerical age-dating techniques to construct geologic histories.
10. Measure atmospheric processes that affect weather and climate.
11. Describe the composition and motion of ocean water and analyze the factors controlling both.
12. Compare properties and motions of objects in the solar system.
13. Demonstrate the collection, analysis, and reporting of data.

Texas Core Objectives

The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. Communication Skills - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. Personal Responsibility - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. Social Responsibility - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
Required Course Materials

  • Access code to Mastering Geology is **required**. Available as eText.

  • Available as eText. You will be asked to print out certain pages, scan, and submit as a part of your lab assignment. Used lab manuals are not recommended due to missing pages.

Note: 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.

Graded Work

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated.

Summary of Graded Work

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>30%</td>
</tr>
<tr>
<td>Mastering Geology assignments</td>
<td>35%</td>
</tr>
<tr>
<td>Lab assignments</td>
<td>32%</td>
</tr>
<tr>
<td>Orientation activities</td>
<td>3%</td>
</tr>
</tbody>
</table>

Final Grade

<table>
<thead>
<tr>
<th>Percentages</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0-59%</td>
<td>F</td>
</tr>
</tbody>
</table>
Description of Graded Work

1. Tests
   - Total of 3 tests throughout the semester.
   - Each test contains 30 multiple choice, true-false, and/or short answer questions.

2. Mastering Geology Assignments
   - Sign in to Blackboard (eCampus) and click on “Mastering Geology” button on the left.
   - Each chapter has two graded assignments: Activities and Quiz. These assignments do not have a time limit.
   - All assignments must be turned in by **11:59PM** on the due date.
   - Late assignments will be accepted with a 10% deduction per day.

3. Lab Exercises
   - Students will not receive a full credit if they were partially absent. This includes tardiness of more than 10 minutes. Students are expected to complete laboratory exercises **in pencil**.

4. Orientation Activities
   - The purpose of these orientation activities is to learn and get familiar with the eCampus course site. At the end of the activities, you should be able to locate/download/upload a file, become familiar with testing style and laboratory format for this course.

5. Extra Credit
   - There are few extra credit assignments. Please see the Extra Credit folder for more detail.

Optional/possible field trip opportunities
   - Perot museum
   - Duck creek
   - Inks lake and Longhorn cavern state parks (overnight)

Additional notes
   - If you notice any glitches or errors, please notify your instructor by email.
   - If your final weighted total is 89.5%, 79.5%, or 69.5%, the number rounds up and you would receive A, B, or C, respectively.

Late Work Policy
   - **Tests and labs**: Make-up tests or labs will only be given for accepted absences. Proof must be given (e.g. doctor’s note) and must be arranged prior to the day and time. In case of emergencies, contact the instructor as soon as possible.
   - **Mastering Geology**: Late assignments will be accepted with a 10% deduction per day.
   - Any incomplete assignments will receive a zero.
   - All course work must be completed by 03/12/20.
Academic Dishonesty

- Students caught cheating will receive a failing grade for the course, and will be reported to school officials. Copying someone else’s assignments and/or labs is considered cheating. Both the student who copied, and the student who allowed someone else to copy, will be penalized.

Institutional Policies

Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

Eastfield Institutional Policies (http://www.eastfieldcollege.edu/syllabipolicies)

Course Schedule

- The schedule below is tentative and subject to change. Detailed outline will be provided in class.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Earth Science/ Minerals/ Rocks</td>
</tr>
<tr>
<td>2</td>
<td>Rocks/Plate Tectonics</td>
</tr>
<tr>
<td>3</td>
<td>Plate Tectonics/Earthquakes/Volcanoes</td>
</tr>
<tr>
<td>4</td>
<td>Volcanoes/Geologic Time</td>
</tr>
<tr>
<td>5</td>
<td>Solar System/Hydrogeology &amp; Oceans</td>
</tr>
<tr>
<td>6</td>
<td>Hydrogeology &amp; Oceans</td>
</tr>
<tr>
<td>7</td>
<td>Meteorology</td>
</tr>
<tr>
<td>8</td>
<td>Meteorology</td>
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</tbody>
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