Science, Technology, Engineering and Mathematics (STEM) Division
Geology 1401, Earth Science (4 Credit Hours)
Section 49001
Spring 2020

Times:
Lecture: MW 9:30 – 12:20 PM Room C324
Lab: TR 9:30 – 12:20 PM Room C321

Instructor: Dr. Daniel Murphy
Office: C341
Office Hours: MTWR 8:00-9:00, or by appointment.
Open Lab: F 9:00-10:00 in room C321
E-mail: danielmurphy@dcccd.edu

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

Prerequisite
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.

Required Materials
Access code is NOT required.

Last Day to Withdraw with a ‘W’: February 26th

eCampus
This course will have lots of supplemental learning opportunities available via eCampus. In addition, live grades will be posted on eCampus and practice test questions will all be accessible when you log in to the class. Some assignments, including exams will be required to be handed in over eCampus. I recommend checking your eCampus site at least a couple times a week.

Course Requirements and Grading Criteria:
This course has both a lecture and lab components of which participation is required, this include reading the assigned material before coming to class. Good reading habits and reading comprehension skills are important to doing well in this course. Beside the scheduled lecture, lab, and final exams; weekly lab assignments, scheduled quizzes, and reading assignments are included as part of the requirements for this course.
This class has 2 lecture exams, 2 lab exams, 1 final exam, 12 quizzes, and 13 lab exercises. Course grade is based on a total of 1000 class points. Breakdown of the point distribution and grading scheme is shown in the table below. You can ask me your grade at any of my office hours.
Point Distribution:

<table>
<thead>
<tr>
<th>Grading Item</th>
<th>Class Points</th>
<th>Point Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Exams (2); 125 points each</td>
<td>250</td>
<td>810 - 900 points = A</td>
</tr>
<tr>
<td>Lecture Quizzes (12); 10 points each</td>
<td>120</td>
<td>720 - 809 points = B</td>
</tr>
<tr>
<td>Lab Exercises (13); 10 points each</td>
<td>130</td>
<td>630 – 719 points = C</td>
</tr>
<tr>
<td>Lab Exams (2); 100 points each</td>
<td>200</td>
<td>540 - 629 points = D</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>200</td>
<td>Below 540 points = F</td>
</tr>
<tr>
<td><strong>Total Class Points:</strong></td>
<td><strong>900</strong></td>
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</table>

**Quizzes**
At least 12 quizzes will be given over the semester on eCampus. Quiz material will be over the coming day’s lecture and the map handed out at the beginning of the semester. Quizzes will be taken using your smart phone and the socrative app. Any quizzes over 12 can replace lower grades from the first 12, if offered. Quizzes are open notes. No make-up quizzes are given.

**Reading Assignment(s)**
One or two reading specific reading assignments will be given during the semester. These assignments can have a set of questions that accompany them as well as a follow up quiz. These assigned reading may be topical on recent or current, geologic events that have taken place, as such they cannot be scheduled at the start of the semester. Students will have at least one week to complete assignment.

**Lecture Exams;** Students are expect to take these exams at their scheduled time. If an exam is missed, even with an “excused absence”, the student must notify me (email preferred) within 24 hours of missing the exam or they will lose the privilege to petition for a make-up exam. If a make-up lecture exam is approved it will be different than those taken by the rest of the class. An essay format may be used for make-up exams. An approved make-up exam must be taken within the same week as the scheduled exam, preferably within 48 hours of missing the scheduled exam. There will be no make-ups for missed lab exams!

The Lecture Exams, Lab Tests, and Final Exam will include a variety of question formats, including multiple-choice, fill in the blank, and essay questions. All exams are closed book. Exams and lab tests will be returned in class for students to review. The exams usually are returned a week after it has been taken. No lecture or lab exams grades are dropped. Lecture Exams will be administered through eCampus using the Respondus Lockdown Browser.

**Respondus Browser**
**Directions for accessing the “Respondus” download link:** When you log onto eCampus, there are choices to your left under TOOLS. About the ninth one down, under tools, is Respondus Lockdown Browser...Click that! It will take you to an installation page. On the installation page, you will select the operation system that your computer is using. Choose your operating system. From there, once the installation has downloaded, you will need to sign into eCampus again through the Respondus software that you downloaded. You will not be able to view any other pages except those that are in eCampus. Find the test that you need to take and that’s it!!

**Lab Work**
You must buy the lab manual. You will not be allowed to participate in lab unless you have your own copy of the lab manual to write in. Lab assignments are done during the lab period and must be
completed to receive credit for the lab. Students are required to have read over the assigned lab chapter and any other posted readings before coming to lab.

**Make-up & Late Assignment**
Make-up lecture exams 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. Due dates are enforced. **There will be no make-ups for missed lab exams!**

**Participation**
Students are expected to actively participate in classroom activities. There will be a number of in-class exercises in varying formats. These exercises provide the opportunity for you to practice geological concepts and strengthen your understanding.

******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.

There is nothing that will get your instructor angry faster than plagiarism. The theft of intellectual property is not a victimless crime, and it will be dealt with severely. The first incident will result in an automatic grade of zero on the assignment and possibly the course at the instructor’s discretion. Even a ‘small portion’ will result in a zero. If you are not sure what plagiarism is, check: [http://www.plagiarism.org/plagiarism-101/types-of-plagiarism](http://www.plagiarism.org/plagiarism-101/types-of-plagiarism)

**Laboratory Practice**
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**. Please write legibly. If the instructor cannot read your writing, the students will not receive credit. Quality (neatness) of diagrams will also be incorporated into the lab grade. **Food and drinks are prohibited in the laboratory.**

**Classroom Etiquette**
Headphones are strictly prohibited. A student who repeatedly disrupts the learning environment will be asked to leave the classroom and will be reported to the dean. This includes texting, and a student will be penalized.

**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.

**Lab:**
1. Classify rocks and minerals based on chemical composition, physical properties, and origin.
2. Apply knowledge of topographic maps, diagrams, and/or photographs to identify landforms and explain the processes that created them.
3. 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.
4. Apply relative and numerical age-dating techniques to construct geologic histories.
5. Measure atmospheric processes that affect weather and climate.
6. Describe the composition and motion of ocean water and analyze the factors controlling both.
7. Compare properties and motions of objects in the solar system.
8. Demonstrate the collection, analysis, and reporting of data.

Institutional Policies relating to this course can be accessed from the following link:
https://www.eastfieldcollege.edu/syllabipolicies

<table>
<thead>
<tr>
<th>Date</th>
<th>Reading Assignment</th>
<th>Lecture Topic</th>
<th>Lab Topic</th>
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<tbody>
<tr>
<td>M Jan 20</td>
<td>Introduction</td>
<td>Introduction and Minerals</td>
<td>Intro to Lab/ Minerals</td>
</tr>
<tr>
<td>W Jan 22</td>
<td>Ch 1 and 2</td>
<td>Minerals and Igneous Rocks</td>
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<tr>
<td>M Jan 27</td>
<td>Chapter 2</td>
<td>Sedimentary and Metamorphic</td>
<td>Labs 1 and 2</td>
</tr>
<tr>
<td>W Jan 29</td>
<td>Chapter 5</td>
<td>Plate Tectonics</td>
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<tr>
<td>M Feb 3</td>
<td>Chapter 6</td>
<td>Earthquakes and Mountains</td>
<td>Labs 2 and 7</td>
</tr>
<tr>
<td>W Feb 5</td>
<td>Chapter 7</td>
<td>Mountains and Volcanoes</td>
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<tr>
<td>M Feb 10</td>
<td>Chapter 8</td>
<td>Geologic Time</td>
<td>Rock and Mineral Test</td>
</tr>
<tr>
<td>W Feb 12</td>
<td>Chapter 3</td>
<td>Surface Water</td>
<td>Labs 6 and 9</td>
</tr>
<tr>
<td>M Feb 17</td>
<td>Chapter 3</td>
<td>Ground Water &amp; Mass Wasting</td>
<td>Mapping Lab</td>
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<tr>
<td>W Feb 19</td>
<td>Chapter 9</td>
<td>Oceans</td>
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<tr>
<td>M Feb 24</td>
<td>Chapter 10</td>
<td>Ocean Circulation</td>
<td>Labs 10 and 11</td>
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<tr>
<td>W Feb 26</td>
<td>Chapter 11</td>
<td>Atmosphere</td>
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<tr>
<td>M March 2</td>
<td>Chapter 12</td>
<td>Humidity</td>
<td>Labs 12, 13, and 14</td>
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<tr>
<td>W March 4</td>
<td>Ch 13 and 14</td>
<td>Clouds, and Weather</td>
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<tr>
<td>M March 9</td>
<td>Chapter 15</td>
<td>The Solar System</td>
<td>Lab 18</td>
</tr>
<tr>
<td>W March 11</td>
<td>Chapter 16</td>
<td>The Universe</td>
<td>Lab Final Exam</td>
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</tbody>
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Cumulative Final Exam – March 12

*****Field Trips*****
There are three optional field trips planned for the semester that will happen on Friday afternoons or Saturday morning, depending on class preference. If you cannot come with us on the field trip you need to let me know at least a week in advance.

*****Field Trip Schedule*****
Perot Museum of Natural Science (extra credit)
Wednesday, March 11th, 9:00 AM – 12:00 PM

InnerSpace Caverns (extra credit)
Saturday, February 29th

Arbuckle Mountains (extra credit)
Friday – Saturday, February 21-22nd
The instructor reserves the right to amend this syllabus as necessary.

IT'S IN THE SYLLABUS

This message brought to you by every instructor that ever lived.

WWW.PHDCOMICS.COM