GEOLOGY 1303.001–ESSENTIALS OF GEOLOGY
SPRING SEMESTER 2012
Dr. TANIA-MARIA ANDERS – OFFICE: CS 202
Phone Extension: 3755 – Email: tania.anders@tamucc.edu

Text: Essentials of Geology, 3rd edition, Stephen Marshak; W.W. Norton & Company; 2009
ISBN: 978-0-393-93238-6
or other suitable Physical Geology text

Class Meetings: Tue/Thu, 09:30 to 10:45 p.m., ST 101
Office Hours: Mon 9:00 am to noon, Tue/Thu 11:00 to noon and 3:30 to 4:30 pm. I encourage you to email me with any questions or concerns (see email address listed above).

Course Description
GEOL 1303 is a one-semester introductory earth science course for students majoring in a non-science subject area. This course may not be counted toward a degree in Geology or Environmental Sciences. It will not substitute for GEOL 1403 or GEOL 1404. This course counts toward the natural science component of the University Core Curriculum.

The goal of this class is to give you a well-rounded introduction to your home planet and an understanding of natural geologic phenomena such as volcanoes and earthquakes. The first half of the course will cover basic geologic principles, e.g. plate tectonics and the rock cycle. During the second half of the semester we will focus on geologic phenomena that affect our everyday lives, including earthquakes, volcanism, fossil fuels, mineral resources and global change.

Student Learning Outcomes
Upon successful completion of this course, you should be familiar with / demonstrate knowledge of:

- the composition and structure of the solid Earth,
- the theory of Plate Tectonics,
- the various rock types that make up Earth’s crust,
- the internal and external processes that shape our planet,
- the interaction between some of the main components of the Earth System.
- the interdependence of science and technology and their influence on, and contribution to, modern culture.

Evaluation and Grade Assignment
Your final grade will be based on a % curve from the following point distribution:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>Exams (4@60 points each)</td>
</tr>
<tr>
<td>B</td>
<td>Chapter Quizzes: 5@10 points each</td>
</tr>
<tr>
<td>C</td>
<td>In-classroom exercises</td>
</tr>
<tr>
<td>D</td>
<td>Comprehensive Final Exam</td>
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<tr>
<td>Total:</td>
<td></td>
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A perfect score in this course would be to earn all 440 points available. There will be no curve at the end of the semester! Final grading will be as follows:

- A = 440-396 points
- B = 395-352 points
- C = 351-308 points
- D = 307-264 points
- F <264 points

Extra Credit
You have three opportunities to earn extra credit points.

1. Turning in your completed score card (posted on blackboard) on the day of the final (5 points). This card will help you to keep track of your grades. Record your grades regularly!
2. Points scored on lecture quizzes beyond the 5 quizzes counting towards your grade.
3. Presenting a current geologic event to the class (“Geology in the News”) – up to 10 points
Exams, Chapter Quizzes, and In-classroom Exercises

The grade you will receive for this class is based on your performance on exams, quizzes and exercises. Missing any of these opportunities to collect points towards your point total will most likely affect your grade. So: **attend class!!** If you miss an exam (which includes anyone walking in more than 15 minutes late on the day of an exam!) you will be given the opportunity to make up this exam on the day of the final (after you have taken the final). It is your responsibility to contact me **within one week** of missing an exam to let me know that you wish to make up the exam. You lose the privilege of making up an exam if you fail to notify me during this time period.

**Chapter Quizzes and in-classroom exercises** happen randomly and help me monitor your progress and regular attendance of the class. Quizzes will consist of a short series of multiple-choice questions to be answered in approximately 5-10 minutes usually at the beginning of the class period. Students who come to class late need to wait outside the classroom until the class has completed the quiz and may **not** make up the missed quiz at a later time. If you are absent for medical reasons or a University related event, you will be given an opportunity to make up missed quizzes at the end of the semester after the final. Missed exercises should be made up as soon as you return to class. Again, it is your responsibility to contact me regarding the make-up of missed quizzes/exercises within a week (and provide documentation). After that you lose your privilege to make up the missed work. Chapter quizzes may include material covered in previous lectures or from the reading assignments.

Classroom/Professional Behavior

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. The use of cell phones, pagers, CD players, headphones and similar electronic devices is not allowed in class. Keep these devices in your bags, **not on the tables.** You may be asked to refrain from using a laptop in class.

Cheating will not be tolerated and will result in a failing grade in the course and possible further disciplinary action by the university.

Notice to Students with Disabilities and Veterans

Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in Corpus Christi Hall (CCH) 116, at 825-5816. If you need disability accommodations in this class, please see me as soon as possible.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

Academic Advising

The College of Science and Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College's Academic Advising Center is located in Center for Instructions CI 350, and can be reached at 825-6094.

Grade Appeal Process

As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with
the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

Dropping a Class
I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. March 30, 2012 is the last day to drop a class with an automatic grade of "W" this term.

Reading Assignments
All reading assignments are to be read prior to the class in which the material will be discussed. Your text is accompanied by an online Study Guide, which can assist you in understanding the content of the textbook. It also provides valuable guidelines regarding general study skills, note taking, and test preparation. The following lecture schedule will be followed as closely as possible although some revisions may become necessary during the semester.

Important Dates

<table>
<thead>
<tr>
<th>January 12</th>
<th>First class</th>
<th>April 05</th>
<th>Exam 3</th>
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<tbody>
<tr>
<td>February 07</td>
<td>Exam 1</td>
<td>May 01</td>
<td>Exam 4</td>
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<tr>
<td>March 01</td>
<td>Exam 2</td>
<td>May 01</td>
<td>Last day of class</td>
</tr>
<tr>
<td>March 12-16</td>
<td>Spring Break</td>
<td>May 03</td>
<td>Final exam (08:00-10:30 am)</td>
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Lecture Schedule

January
Thu 01/12 Introduction / And Just What is Geology?, Prelude
Tue 01/17 Chapter 1: The Earth in Context
Thu 01/19 Chapter 1: The Earth in Context cont.
Tue 01/24 Chapter 2: The Way Earth Works: Plate Tectonics
Thu 01/26 Chapter 2 cont.
Tue 01/31 Chapter 2 cont., Chapter 8: A Violent Pulse: Earthquakes, Int. D

February
Thu 02/02 Chapter 8 cont.
Tue 02/07 EXAM 1
Thu 02/09 Chapter 3: Patterns in Nature: Minerals
Tue 02/14 Chapter 3 cont.
Thu 02/16 Chapter 4: Up from the Inferno: Magma and Igneous Rocks, Int. A
Tue 02/21 Chapter 4 cont.
Thu 02/23 Chapter 4 cont., Chapter 5: The Wrath of Vulcan: Volcanic Eruptions
Tue 02/28 Chapter 5 cont.

March
Thu 03/01 EXAM 2
Tue 03/06 Chapter 6: Pages of Earth’s Past: Sedimentary Rocks, Int. B
Thu 03/08 Chapter 6 cont.
Tue 03/13 Spring Break, no classes
Thu 03/15 Spring Break, no classes
Tue 03/20 Chapter 6 cont.
Thu 03/22 Chapter 7: Metamorphism: A Process of Change, Int. C
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Notes</th>
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<tbody>
<tr>
<td>03/27</td>
<td>Tue</td>
<td>Chapter 7 cont.</td>
</tr>
<tr>
<td>03/29</td>
<td>Thu</td>
<td>Geology of Texas (includes parts of Ch. 9 and 10)</td>
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**April**

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<tr>
<th>Date</th>
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<tr>
<td>04/03</td>
<td>Tue</td>
<td>Geology of Texas cont.</td>
</tr>
<tr>
<td>04/05</td>
<td>Thu</td>
<td>EXAM 3</td>
</tr>
<tr>
<td>04/10</td>
<td>Tue</td>
<td>Chapter 12: Riches in Rock: Energy and Mineral Resources</td>
</tr>
<tr>
<td>04/12</td>
<td>Thu</td>
<td>Chapter 12 cont.</td>
</tr>
<tr>
<td>04/17</td>
<td>Tue</td>
<td>Chapter 12 cont.</td>
</tr>
<tr>
<td>04/19</td>
<td>Thu</td>
<td>Chapter 19: Global Change in the Earth System</td>
</tr>
<tr>
<td>04/24</td>
<td>Tue</td>
<td>Chapter 19 cont.</td>
</tr>
<tr>
<td>04/26</td>
<td>Thu</td>
<td>Chapter 19 cont.</td>
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**May**

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<tr>
<th>Date</th>
<th>Day</th>
<th>Notes</th>
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<tbody>
<tr>
<td>05/01</td>
<td>Tue</td>
<td>EXAM 4 (last day of class)</td>
</tr>
<tr>
<td>05/03</td>
<td>Thu</td>
<td>Comprehensive final exam (08:00 to 10:30 am)</td>
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**Drafting Supplies**

Some basic drafting supplies will be required for this class (see below). Please bring these items with you to each lecture.

- Mechanical pencil, lead size of 0.5 mm or finer
- Eraser
- Colored pencils (six colors)
- 12” ruler with mm markings