GEOLOGY 1303.001 – ESSENTIALS OF GEOLOGY
SUMMER 2 – 2013
Dr. TANIA-MARIA ANDERS
Email: tania.anders@tamucc.edu

ISBN: 978-0-393-91939-4
or other suitable Physical Geology text

Class Meetings: Mon-Thu 10:00 to 11:55 a.m., CS 101
Office Hours: by appointment.

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 and topics 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.

In addition to the content knowledge the course also provides you with basic core competencies such as:
- critical thinking, e.g. when approaching topics using the scientific method
- problem solving by working collaboratively in teams
- communication skills, e.g. when presenting some of your work to the class verbally or turning in writing assignments.
- Empirical and quantitative skills when working with numeral data, reading graphs etc.

Please always remember that you are the one responsible for your success. I will do my best to guide you in your learning process but without YOU assuming an active role, by completing work, studying outside of class time, asking questions, making use of help offered etc. you may not successfully pass this course.

You will have an SI (Supplemental Instructions) leader for this class. Please make use of this service! The SI leader will answer questions, explain concepts, and help you develop the important routine of adding extra study time outside of class.
**Evaluation and Grade Assignment**

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

A) Exams (3@80 points each)  
240 points
B) Chapter Quizzes: 5@10 points each  
50 points
C) In-classroom exercises  
50 points
D) Comprehensive Final Exam  
100 points
Total:  
440 points

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 loose 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 loose 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/Academic Integrity/Plagiarism**

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, 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.

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) 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 Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, 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 Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage (http://sci.tamucc.edu/students/GradeAppeal.html). For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

Statement of Academic Continuity
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

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. July 25, 2014 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>July</th>
<th></th>
<th>July 29</th>
<th></th>
<th>August 07</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Exam 1</td>
<td>29</td>
<td>Exam 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Exam 2</td>
<td></td>
<td>Final</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lecture Schedule**

**July**

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>07/14</td>
<td>Introduction/ And Just What is Geology? Prelude; Appendix</td>
</tr>
<tr>
<td>Tue</td>
<td>07/08</td>
<td>Chapter 1 cont., Chapter 2: The Way Earth Works: Plate Tectonics</td>
</tr>
<tr>
<td>Wed</td>
<td>07/09</td>
<td>Chapter 2 cont.</td>
</tr>
<tr>
<td>Thu</td>
<td>07/10</td>
<td>Chapter 8: A Violent Pulse: Earthquakes, Int. D</td>
</tr>
<tr>
<td>Mon</td>
<td>07/14</td>
<td><strong>Exam 1</strong>; Chapter 3: Patterns in Nature: Minerals</td>
</tr>
<tr>
<td>Tue</td>
<td>07/15</td>
<td>Chapter 3 cont., Chapter 4: Up from the Inferno: Magma and Igneous Rocks, Int. A</td>
</tr>
<tr>
<td>Wed</td>
<td>07/16</td>
<td>Chapter 4 cont.</td>
</tr>
<tr>
<td>Thu</td>
<td>07/17</td>
<td>Chapter 5: The Wrath of Vulcan: Volcanic Eruptions</td>
</tr>
<tr>
<td>Mon</td>
<td>07/21</td>
<td><strong>Exam 2</strong>; Chapter 6: Pages of Earth’s Past: Sedimentary Rocks, Int. B</td>
</tr>
<tr>
<td>Tue</td>
<td>07/22</td>
<td>Chapter 6 cont.</td>
</tr>
<tr>
<td>Wed</td>
<td>07/23</td>
<td>Chapter 7: Metamorphism: A Process of Change, Int. C</td>
</tr>
<tr>
<td>Thu</td>
<td>07/24</td>
<td>Geology of Texas (includes parts of Ch. 9 and 10)</td>
</tr>
<tr>
<td>Mon</td>
<td>07/28</td>
<td>Geology of Texas cont.</td>
</tr>
<tr>
<td>Tue</td>
<td>07/29</td>
<td><strong>Exam 3</strong>; Introduction Geologic Resources</td>
</tr>
<tr>
<td>Wed</td>
<td>07/30</td>
<td>Chapter 12: Riches in Rock: Energy and Mineral Resources</td>
</tr>
<tr>
<td>Thu</td>
<td>07/31</td>
<td>Chapter 12 cont.</td>
</tr>
</tbody>
</table>

**August**

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>08/04</td>
<td>Chapter 19: Global Change in the Earth System</td>
</tr>
<tr>
<td>Tue</td>
<td>08/05</td>
<td>Chapter 19 cont.</td>
</tr>
<tr>
<td>Wed</td>
<td>08/06</td>
<td>Extra day; review</td>
</tr>
<tr>
<td>Thu</td>
<td>08/07</td>
<td><strong>Final Exam (comprehensive)</strong></td>
</tr>
</tbody>
</table>

**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