Instructor Information

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Office Hours:
- Monday 2:10 PM – 3:10 PM
- Tuesday 1:00 PM – 2:00 PM
- Wednesday 1:00 PM – 2:00 PM
- Thursday 10:00 AM – 11:00 AM
- Friday 1:00 PM – 2:00 PM

Division Office and Phone: School of Science & Health Professions
Sabine Hall, SH205
972-238-6248

Course Information

Course Title: Earth Science I
Course Number: GEOL 1401
Section Number: 89410
Semester/Year: Spring 2020
Credit Hours: 4 Credit Hours
Class Meeting Time/Location: Online only
Certification Date: January 27, 2020
Last Day to Withdraw: February 26, 2020

Course Prerequisites
No Prerequisites required.
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.)

Student Learning Outcomes
Upon successful completion of this course, students will:
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.
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**

1) *Access to the Internet* – Students should check eCampus **daily**.

   - ISBN-10: 0393614107

3) eScience Earth Science Lab Kit - Lab Kit *kit7055* from eSciencelabs.com – website has additional student materials.

   Students may purchase either the lab kit code (*kit7055*) from:

   - **a)** the Richland Bookstore
     - Or –
   - **b)** direct from eSciencelabs.com

   **These are the only two locations in which to purchase this custom required lab kit for GEOL 1401.** The lab kit will be used to complete the lab exercise portion of this course. See additional information on eCampus.

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.

2 exams (midterm and final); Weekly lab exercises and homework assignments; weekly discussion board topics; online group project – see detailed course outline at the bottom of this syllabus.

Students are encouraged to check ecampus daily during the semester for course announcements. Students are able to begin homework assignments and lab exercises and leave these items while saving their progress - Do not click on 'save and submit' unless you are ready for me to grade an assignment. The instructor will not reset any homework assignments or exams in the event of accidental submittal by the student – no exceptions. **DO NOT plagiarize – always reference others work.**

### Summary of Graded Work

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>Totals</th>
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</thead>
<tbody>
<tr>
<td>Chapter Assignments</td>
<td>12 @ 25 points each</td>
<td>300 points</td>
</tr>
<tr>
<td>Lab Exercises</td>
<td>12 @ 25 points each</td>
<td>300 points</td>
</tr>
<tr>
<td>Discussions</td>
<td>4 @ 15 to 25 points each</td>
<td>75 points</td>
</tr>
<tr>
<td>Midterm Exams</td>
<td>4 @ 25 points each</td>
<td>100 points</td>
</tr>
<tr>
<td>Final Exams</td>
<td>4 @ 37.5 points each</td>
<td>150 points</td>
</tr>
<tr>
<td>Group Project</td>
<td>1 @ 75 points</td>
<td>75 points</td>
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<tr>
<td><strong>TOTAL:</strong></td>
<td></td>
<td><strong>1,000 points</strong></td>
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### Final Grade

<table>
<thead>
<tr>
<th>Points</th>
<th>Percentages</th>
<th>Letter Grade</th>
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</thead>
<tbody>
<tr>
<td>895 - 1,000</td>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>795 - 899</td>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>695 - 799</td>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>595 - 699</td>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0 - 594</td>
<td>0-59%</td>
<td>F</td>
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Attendance and Your Final Grade
In order to be successful students must participate in enrolled courses. Since this is an online based course, students are responsible for submitting weekly assignments by the due date and time. Multiple zeros will result in an automatic F for the course. Do not wait until the last minute to submit your assignments, as computer issues are not an excuse for late submittal. Students may submit lab and homework assignments early.

Late Work Policy
Assignments and Labs may be submitted up to 7 days late with a 10% late penalty per day late. No work may be submitted after this late period – no exceptions.

Missed material (assignments, exams, discussion boards) can only be made up past the due date late period with instructor permission.

Other Course Policies
Please respect your instructor and fellow classmates – this is a learning environment and you paid to be here. Please speak with or email your instructors with any questions or concerns throughout the semester. Students must:

- Practice netiquette (see general info folder on eCampus) with discussion assignments.

- Complete their work and submit assignments on or before the due date without penalty. Work may be submitted late up to 7 days from the due date, after that the grade is an automatic zero. There is a penalty of 10% per day if submitted during the late window. Work cannot be submitted after the course ends.

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.

Richland Institutional Policies (http://www.richlandcollege.edu/syllabipolicies)
# Course Outline for: GEOL 1401 Spring 2020

<table>
<thead>
<tr>
<th>Week</th>
<th>Lab Section</th>
<th>Lecture Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong>&lt;br&gt;Due by 11:59pm on Sunday, January 26&lt;sup&gt;th&lt;/sup&gt;</td>
<td><strong>Lab 1</strong>: Introduction to Earth Science&lt;br&gt;<strong>Lab 2</strong>: Plate Tectonics (Lab kit <strong>not</strong> required for either lab)</td>
<td>- Read Chapters 1 and 2&lt;br&gt;- Complete Homework Assignment 1&lt;br&gt;- Complete Homework Assignment 2&lt;br&gt;- Discussion Board Topic 1</td>
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<tr>
<td><strong>Week 2</strong>&lt;br&gt;Due by 11:59pm on Sunday, Feb. 2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td><strong>Lab 3</strong>: Minerals&lt;br&gt;<strong>Lab 4</strong>: Volcanoes and Igneous Rocks <em>(Both labs require lab kit)</em></td>
<td>- Read Chapters 3 and 4&lt;br&gt;- Complete Homework Assignment 3&lt;br&gt;- Complete Homework Assignment 4&lt;br&gt;- Discussion Board Topic 2</td>
</tr>
<tr>
<td><strong>Week 3</strong>&lt;br&gt;Due by 11:59pm on Sunday, Feb. 9&lt;sup&gt;th&lt;/sup&gt;</td>
<td><strong>Lab 5</strong>: Sedimentary Rocks&lt;br&gt;<strong>Lab 6</strong>: Metamorphic Rocks <em>(Both labs require lab kit)</em></td>
<td>- Read Chapters 5 and 6&lt;br&gt;- Complete Homework Assignment 5&lt;br&gt;- Complete Homework Assignment 6&lt;br&gt;- Discussion Board Topic 3</td>
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<tr>
<td><strong>Week 4</strong>&lt;br&gt;Due by 11:59pm on Sunday, Feb. 16&lt;sup&gt;th&lt;/sup&gt;</td>
<td><strong>Lab Midterm Exam</strong></td>
<td>- Lecture Midterm Exam&lt;br&gt;- Group Project Outline&lt;br&gt;- Group Team Assessment Survey #1</td>
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<td><strong>Week 5</strong>&lt;br&gt;Due by 11:59pm on Sunday, Feb. 23&lt;sup&gt;rd&lt;/sup&gt;</td>
<td><strong>Lab 7</strong>: Deformation Lab&lt;br&gt;<strong>Lab 8</strong>: Earthquake Lab (Lab kit <strong>not</strong> required for either lab)</td>
<td>- Read Chapters 7 and 8&lt;br&gt;- Complete Homework Assignment 7&lt;br&gt;- Complete Homework Assignment 8&lt;br&gt;- Discussion Board Topic 4</td>
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<td><strong>Week 6</strong>&lt;br&gt;Due by 11:59pm on Sunday, March 1&lt;sup&gt;st&lt;/sup&gt;</td>
<td><strong>Lab 9</strong>: Earth’s Mineral and Energy Resources <em>(Requires lab kit)</em>&lt;br&gt;<strong>Lab 10</strong>: Fluvial Processes and Landforms <em>(Requires lab kit)</em></td>
<td>- Read Chapters 11 and 12&lt;br&gt;- Complete Homework Assignment 9&lt;br&gt;- Complete Homework Assignment 10</td>
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<tr>
<td><strong>Week 7</strong>&lt;br&gt;Due by 11:59pm on Sunday, March 8&lt;sup&gt;th&lt;/sup&gt;</td>
<td><strong>Lab 11</strong>: Groundwater <em>(Requires lab kit)</em>&lt;br&gt;<strong>Lab 12</strong>: Glaciers and Deserts <em>(Does not require lab kit)</em></td>
<td>- Read Chapters 13 and 14&lt;br&gt;- Complete Homework Assignment 11&lt;br&gt;- Complete Homework Assignment 12</td>
</tr>
<tr>
<td><strong>Week 8</strong>&lt;br&gt;Due by 11:59pm on <strong>Thursday</strong>, March 12&lt;sup&gt;th&lt;/sup&gt;</td>
<td><strong>Lab Final Exam</strong></td>
<td>- Lecture Final Exam&lt;br&gt;- Group Project&lt;br&gt;- Bonus Assignments</td>
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