1. COURSE TITLE, NUMBER, AND SECTION:
Physical Geology, GEOL 1403 - 313

2. INSTRUCTOR INFORMATION:
Instructor: Robert M. Goll
Office: G234
Office Hours: Monday and Thursday, 4:30 – 5:30pm
Telephone (Office): 979 209-7495
E-mail: robert.goll@blinn.edu

3. COURSE DESCRIPTION:
General principles of physical geology. An introduction to the origin, composition, structure and dynamics of planet Earth. Topics are explored within the general context of plate tectonic theory and include: minerals and rocks, weathering and erosion, geological time, earthquakes, volcanoes, mountain building, oceans, landforms and natural resources. Laboratory work involves the practical application of geological principles such as rock and mineral identification, geologic and topographic map interpretation, and geological data analysis. In class time is set at three-class lecture hours and three laboratory hours per week. Credit: Four semester hours.

4. PREREQUISITES:
Exemption from or passing score on the reading section of the state test or completion of READ 0306 with a “C” or higher score.

5. CORE CURRICULUM:
This is a Core Course in the 42-Hour Core of Blinn College. As such, students will develop proficiency in the appropriate Intellectual Competencies, Exemplary Educational Objectives, and Perspectives. www.blinn.edu/corecurriculum

6. PHYSICAL GEOLOGY LEARNING OUTCOMES:
- Examine and analyze rock and mineral specimens and their occurrence and determine their context within the rock cycle.
- Comprehend plate tectonic theory and evaluate its significance to geology. Relate the nature of Earth’s internal structure and tectonics to geological phenomena (e.g., volcanoes, earthquakes, deformational structures, etc.).
- Understand geologic time and the rock record, including formation of Earth and Solar System. Be able to apply principles of relative and numerical dating.
- Recognize the role of surficial processes (water, wind, ice and gravity) and identify resulting landforms; identification and interpretation of landforms based on topographic maps.
- Relate geology to human affairs; assess geohazard risk (earthquake, volcanoes, floods), and natural resources.

7. REQUIRED TEXTBOOKS & MATERIALS:


Lecture Notes:
Supplemental Data and Information:
Open Geology-aid Lab – Friday, G215 from 1:30-3:30 pm,
E-Campus page (Go to - https://ecampus.blinn.edu/).
8. COURSE CONTENT AND SCHEDULE:

Lecture: Tuesday/Thursday 5:40 – 6:55 pm Rm 216
Laboratory: Tuesday/Thursday 7:05 – 8:40 pm Rm 216

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Lecture Topic</th>
<th>Reading Assignment</th>
<th>Lab Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEEK 1</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Aug 30</td>
<td>Intro to Geology</td>
<td>EARTH, Ch. 1, p 2-33</td>
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<tr>
<td>Sept 1</td>
<td>Intro to Geology</td>
<td>EARTH, Ch. 1, p 2-33</td>
<td>Lab 1. Rock Cycle</td>
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<tr>
<td><strong>WEEK 2</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sept 6</td>
<td>Plate Tectonics</td>
<td>EARTH, Ch. 2, p 72-99</td>
<td>Lab 2, Plate Tectonics</td>
</tr>
<tr>
<td>Sept 8</td>
<td>Minerals &amp; Matter</td>
<td>EARTH, Ch. 3, p 72-99</td>
<td>Lab 3, Mineral Properties</td>
</tr>
<tr>
<td><strong>WEEK 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept 13</td>
<td>Minerals &amp; Matter</td>
<td>EARTH, Ch. 3, p 72-99</td>
<td>Lab 4, Mineral Identification</td>
</tr>
<tr>
<td>Sept 15</td>
<td>Igneous Rocks</td>
<td>EARTH, Ch. 4, p 102-123</td>
<td>Lab 5, Igneous Rocks</td>
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<tr>
<td><strong>WEEK 4</strong></td>
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<tr>
<td>Sept 20</td>
<td>Volcanoes</td>
<td>EARTH, Ch. 5, p 126-163</td>
<td>Lab 6, Rock &amp; Mineral Review I</td>
</tr>
<tr>
<td>Sept 22</td>
<td>Weathering</td>
<td>EARTH, Ch. 6, p 165-187</td>
<td>Lab 6, Rock &amp; Mineral Review I</td>
</tr>
<tr>
<td><strong>WEEK 5</strong></td>
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<td></td>
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<tr>
<td>Sept 27</td>
<td>Sedimentary Rocks</td>
<td>EARTH, Ch 7, p 194-219</td>
<td>Lab 7, Sedimentary rocks</td>
</tr>
<tr>
<td>Sept 29</td>
<td>EXAM #1 Chapters 1-7</td>
<td>EARTH, Ch 8, p. 221-245</td>
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<tr>
<td><strong>WEEK 6</strong></td>
<td>Metamorphic Rocks</td>
<td>EARTH, Ch 8, p. 221-245</td>
<td>Lab 8, Metamorphic Rocks</td>
</tr>
<tr>
<td>Oct 4</td>
<td>Metamorphic Rocks</td>
<td>EARTH, Ch 8, p. 221-245</td>
<td>Lab 9, Deformation</td>
</tr>
<tr>
<td>Oct 6</td>
<td>Crustal Deformation</td>
<td>EARTH, Ch 10, p 274-293</td>
<td>Lab 10, Rock &amp; Mineral Review II</td>
</tr>
<tr>
<td><strong>WEEK 7</strong></td>
<td>Geologic Time</td>
<td>EARTH, Ch 9, p 248 - 271</td>
<td>Lab Quiz #1</td>
</tr>
<tr>
<td>Oct 11</td>
<td>Geologic Time</td>
<td>EARTH, Ch 9, p 248 - 271</td>
<td>Lab 11, Geologic Time</td>
</tr>
<tr>
<td><strong>WEEK 8</strong></td>
<td>Earthquakes</td>
<td>EARTH, Ch 11, p 296-323</td>
<td>Lab 12, Earthquake Hazards</td>
</tr>
<tr>
<td>Oct 18</td>
<td>Earthquakes</td>
<td>EARTH, Ch 12, p 326-347</td>
<td>Lab 13, Isostacy</td>
</tr>
<tr>
<td>Oct 20</td>
<td>Earth’s Interior</td>
<td>EARTH, Ch 13, p 350-375</td>
<td>Lab 14, Topographic Maps 1</td>
</tr>
<tr>
<td><strong>WEEK 9</strong></td>
<td>Divergent Boundaries</td>
<td>EARTH, Ch 14, p 414-443</td>
<td>Lab 15, Topographic Maps 2</td>
</tr>
<tr>
<td>Oct 25</td>
<td>Divergent Boundaries</td>
<td>EARTH, Ch 13, p 350-375</td>
<td>Lab 16, Topographic Maps 3</td>
</tr>
<tr>
<td>Oct 27</td>
<td>EXAM #2 Chapters 8 – 13</td>
<td>EARTH, Ch 14, p 414-443</td>
<td>Lab 17, Land Sat Maps</td>
</tr>
<tr>
<td><strong>WEEK 10</strong></td>
<td>Convergent Boundaries</td>
<td>EARTH, Ch 14, p 414-443</td>
<td>Lab Quiz #2</td>
</tr>
<tr>
<td>Nov 1</td>
<td>Convergent Boundaries</td>
<td>EARTH, Ch 14, p 414-443</td>
<td>Lab 16, Topographic Maps 3</td>
</tr>
<tr>
<td>Nov 3</td>
<td>Planetary Geology</td>
<td>EARTH, Ch. 24, p 36-69</td>
<td>Lab 17, Land Sat Maps</td>
</tr>
<tr>
<td><strong>WEEK 11</strong></td>
<td>Earth Evolution</td>
<td>EARTH, Ch 22, p 595-625</td>
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<tr>
<td>Nov 8</td>
<td>Earth Evolution</td>
<td>EARTH, Ch 22, p 595-625</td>
<td>Lab Quiz #2</td>
</tr>
<tr>
<td>Nov 10</td>
<td>Mass Movement</td>
<td>EARTH, Ch 15, p 401-421</td>
<td>Lab 18, Stream Processes</td>
</tr>
<tr>
<td>Nov 10</td>
<td>Running Water</td>
<td>EARTH, Ch 16, p 466-501</td>
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9. CIVILITY STATEMENT:
Members of the Blinn College community, which includes faculty, staff and students, are expected to act honestly and responsibly in all aspects of campus life. Blinn College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect, and demonstrates concern for the personal dignity, rights, and freedoms of every member of the College community, including respect for College property and the physical and intellectual property of others. Civility applies to attire as well as language, behavior, and cell phones. Please dress appropriately for the academic classroom and laboratory.

10. CIVILITY NOTIFICATION STATEMENT:
If a student is asked to leave the classroom or have access to the online classroom denied because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the instructor. It is the student's responsibility to arrange for this conference.

11. COURSE REQUIREMENTS:
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.

a. Lab Work will involve identification of rocks and minerals and determination of their physical and chemical properties. Topographic and geologic maps will be interpreted with the objective of recognition of geologic landforms. Other diverse exercises will acquaint students with the practical aspects of geology.

b. The Final Exam will consist of two parts, each with a value of 100 points
   One part will consist of question bearing on Chapters 18, 19, 21 & 23
   One part will be a comprehensive review of Chapters 1-17 + 22 + 24

12. EXAM AND MAJOR ASSIGNMENT CALENDAR:
Lecture Exam 1: Sept. 29
Lab Quiz 1: Oct. 11
Lecture Exam 2: Oct 27
Lab Quiz 2: Nov 8
Lecture Exam 3: Nov 22
Lab Quiz 3: Dec. 8
Final Exam: Dec. 13, 3:15 – 5:15
13. CRITERIA FOR GRADING AND DETERMINING FINAL GRADE:
This class has 3 lecture exams, 3 lab exams, 1 final exam, and 22 lab exercises. Course grade is based on a total of 1000 class points. Breakdown of the point distribution and grading scheme is shown below.

Criteria for determining Final Grade:
Lecture, Exams: 45%
Lab: 35%
Comprehensive Final Exam: 20%

POUNTS DISTRIBUTION
Lecture Exams 450 points total
(3 exams @ 150 points each)

Final Lecture exam 200 points total

Lab Exercises ~50 points total
(Lab work must be completed during class hours;
Extra credit points are available for most exercises)

Lab Quizzes 300 points total
First Lab Quiz (rocks and minerals): 100 points
Second Lab Quiz (topographic maps & diverse exercises) 100 points
Third Lab Quiz (identification of land forms on topo maps) 100 points

Total = 1000 points

900-1000 points = A
800-899 points = B
700-799 points = C
600-699 points = D
below 600 points= F

The Lecture Exams and Final Exam contain a variety of question formats, including multiple choice, short answer, labels and essay questions. Exams will be taken in the class room unless special considerations apply. If you cannot take the exams at Blinn Campus contact your instructor so that other arrangements can be made.

Lab and Lecture Assignments: Students must read the recommended chapters and Lab works before the classes. Lab exercises are due on the day of class session. Lab exercises can be made up only under the supervision of the instructor or during “Open Lab” hours.

Make-ups: Make-up exams will be offered only under extreme circumstances, and must be organized with the instructor before the exam date.

14. BLINN COLLEGE POLICIES:
a. Attendance:
The College District believes that class attendance is essential for student success; therefore, students are required to promptly and regularly attend all their classes. Each class meeting builds the foundation for subsequent class meetings. Without full participation and regular class attendance, students shall find themselves at a severe disadvantage for achieving success in college. Class participation shall constitute at least ten percent of the final course grade. It is the
responsibility of each faculty member, in consultation with the division chair, to determine how participation is achieved in his or her class. Faculty will require students to regularly attend class and will keep a record of attendance from the first day of class and/or the first day the student’s name appears on the roster through final examinations. If a student has one week’s worth of absences during the semester (2 classes), he/she will be sent an e-mail by the College requiring the student to contact his/her instructor and schedule a conference immediately to discuss his/her attendance issues. If the student subsequently accumulates two weeks worth of unexcused absences (4 classes), he/she will be administratively withdrawn from class.

There are four forms of excused absence officially designated by Blinn College: (1) Observance of religious holy days: The student should notify his/her instructor(s) not later than the 15th day of the semester concerning the specific date(s) that the student will be absent for any religious holy day(s); and (2) representing Blinn College at an official institutional function; (3) official involvement in a high school activity for “dual credit” students and (4) military service. Other excuses will be considered and may be considered excusable at the instructor’s discretion, with documentation.

b. Dropping a Class:
If a student chooses to drop the course, it is that student’s responsibility to complete a drop order at the Office of Enrollment Services. Failure to do so could result in a grade of F in the course. The last day to withdraw with a “Q” is November 18th, 2011.

c. Honor System:
Blinn College does not tolerate cheating, plagiarism or other acts of dishonesty. Definitions of these acts and procedures for dealing with them are described in “Scholastic Dishonesty” in the Blinn College Student Handbook, copies of which are available to you at the information desk of the Administration Building and online on the Blinn College Webpage (http://www.blinn.edu/current.html).

d. Electronic Device Policy:
All the functions of all personal electronic devices designed for communication and/or entertainment (cell phones, pagers, beepers, iPods, and similar devices) must be turned off and kept out of sight in all Blinn College classrooms and associated laboratories. Any noncompliance with this policy will be addressed in accordance with the Blinn College civility policy (Administrative Policy).

e. Problem Resolution:
If you have a complaint about your class, you should first request a conference with your instructor to try and resolve the problems or issues. If the problems or issues cannot be resolved at the instructor level, you should request a conference with the Division Chair, Mr. Dwight Bohlmeyer, Science 241, dbohlmeyer@blinn.edu.

f. Health Concerns:
Food and drink containers are not allowed in either the lab or the classroom during lab or lecture activities.

g. ADA Policy:
Students needing special accommodation because of disabilities must obtain authorization from the Disabilities Counseling Office in College Park Center-Academic Building. The URL to the Office of Disability Services webpage is http://www.blinn.edu/disability.htm. Accommodation is not retroactive from the time of concluding agreement for accommodation.

Do this as soon as possible so that documentation and accommodations can be arranged it may take a couple of weeks to get the forms if you wait. I cannot give any accommodation to students without the Disability Coordinator’s consent.

h. Blinn Handbook:
The above requirements and policies are discussed more fully in the Blinn College Student Handbook which, by reference, is incorporated into this information. Blinn College Student Handbook is available online at http://www.blinn.edu/student%20handbook.pdf. Please obtain and read.

15. OTHER INFORMATION:

*Excused absences:* Students must E-mail the instructor prior to missing class in order to be considered for an excused absence.

*Student E-mail:* Students will receive a weekly message with class materials for the week.

*Dress:* Students should dress in appropriate clothing for the classroom and lab.