GEOL 101 General Geology

Fall and Spring Semesters, Every Year

Lecture Location and times TBA
Instructor; Office; phone; e-mail; office hours: To Be Arranged: course rotates between Department Faculty

Overview. This course satisfies the Silver Core C04 requirement and is designed for non-science majors needing an A-category Core Natural Science course. Fundamentals of physical geology are covered, which support further study in the Earth and Natural Sciences.

GEOL 101 is the introductory course in geology, and discusses earth materials and physical processes that are crucial to the formation of planet Earth. It introduces materials critical to further study in the Geologic sciences, and important to and supportive of further studies in the Earth and Natural Sciences. Prerequisites include satisfaction of core math requirement or SAT score of 610.

Course Materials:
Course Website: WebCampus. The course website on WebCampus will be a primary tool for course communication and will be updated regularly. On this site, I will post general announcements, due dates of homework assignments, exam keys, grades, practice exams, study guides, and supplemental information. It is your responsibility to check the course website regularly for any new content or announcements.

Core Objective 4: Physical & Natural Phenomena:
Students will be able to explain the processes by which the natural and physical world is investigated, articulate basic principles used to explain natural phenomena, and apply scientific processes to real problems using observational or experimental methods.

Course Objectives:
1. Introduce students to earth materials (minerals and rocks)
2. Introduction of the fundamental geologic processes that are dynamically involved in the formation of planet earth.
3. Introduction of typical geologic laboratory and related reporting tools.

Student learning outcomes:
Throughout and upon completion of the course, students will take personal responsibility for their learning and academic success. The following are Student Learning Outcomes (SLOs), which every student may achieve by the completion of the course. Upon completion of this course, students will be able to
1. Recognize and identify common rocks and minerals in hand specimens.
2. Recognize the effects of geologic processes acting in and on the Earth and describe these processes using appropriate terminology.
3. Clearly describe Plate Tectonics in general terms.
4. Evaluate typical laboratory materials pertinent to physical geology, and write laboratory reports in a style appropriate to the field.

**This class has both Lecture and Laboratory components.** Lecture meets three times per week, one hour each lecture; lab meets one time per week, three-hour session. Lecture will primarily include PowerPoint presentations, supported by required text readings. Lecture will include three one-hour closed-book exams. Laboratory will include prepared exercises, local field trips, required readings, and laboratory reports.

**Your grade in this course will be based 75% on lecture and 25% on lab as follows:**

- Lecture exam #1, week #5: 25% of course grade
- Lecture exam #2, week #10: 25% of course grade
- Lecture exam #3, (during final exam period TBA): 25% of course grade
- Lab Exercises/Overall lab grade: 25% of course grade

**Grading Scale**

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>94-100%</td>
<td>A</td>
</tr>
<tr>
<td>90-94%</td>
<td>A-</td>
</tr>
<tr>
<td>88-90%</td>
<td>B+</td>
</tr>
<tr>
<td>82-88%</td>
<td>B</td>
</tr>
<tr>
<td>80-82%</td>
<td>B-</td>
</tr>
<tr>
<td>78-80%</td>
<td>C+</td>
</tr>
<tr>
<td>72-78%</td>
<td>C</td>
</tr>
<tr>
<td>70-72%</td>
<td>C-</td>
</tr>
<tr>
<td>68-70%</td>
<td>D+</td>
</tr>
<tr>
<td>62-68%</td>
<td>D</td>
</tr>
<tr>
<td>60-62%</td>
<td>D-</td>
</tr>
<tr>
<td>Below 60%</td>
<td>F</td>
</tr>
</tbody>
</table>

**General Policies:** Attendance is required for grade. No late work accepted. No makeup work available. Silence your cell phone. If accessing the web during lecture, make certain it is course-appropriate material. Communication via e-mail may be crucial to your success in this course; make certain that the e-mail address you have listed through MyNevada is correct and that you check it regularly.

**General order of Lecture topics:**
- Introduction
- Formation of Earth and the Solar System
- Plate Tectonics
- Introduction to Minerals
- Introduction to Rocks
- Igneous rocks and their formation
- Sedimentary rocks and their formation
- Metamorphic rocks and their formation
- Earthquakes and seismology
- Mountain building
- Mass wasting, running water, ground water
- The ocean
- Glaciers
Deserts
Mineral Resources (?)

**Lab component of GEOL 101:**
You will need the following supplies for lab:
Colored pencils, good eraser, protractor, ruler, compass, clipboard and calculator

Lab materials will be available on WebCampus for you to print out each week. THESE MATERIALS WILL CONSTITUTE YOUR LAB MANUAL.

**Tentative order of Lab Exercises:**
Introduction; reports
Topo maps and profiles
Plate tectonics
Mineral ID
Igneous Rocks
Sedimentary Rocks
Metamorphic Rocks
Structural Geology
Earthquakes
Field Lab: Truckee River
Geologic Time - Fossils
Geologic Time - Relative and Absolute Dating
Field Lab or Glaciers

The lab will have a separate detailed syllabus.

**TO SUCCCEED IN THIS CLASS:**
Come to class
Take Notes
Ask Questions
Read the text
Read and review your notes
Prepare adequately for your exams
Contact me or your lab teaching assistant to discuss any problems

**University Policies:**
**Attendance:** By NSHE policy in Title 4 Chapter 20 A, Section 3, paragraph 1, there are no official absences from any university class. It is the personal responsibility of the student to consult with the instructor regarding absence from class. In the event that a student misses a class because of an official university function or event or because of serious personal issues, the Office of the Vice President for Student Services may, at its discretion, send an explanation to affected faculty. The instructor shall make the final determination on whether the missed work can be done at a time other than during the regularly scheduled class period.

**Academic Success Services:** Your student fees cover usage of the Math Center (784-4433 or http://www.unr.edu/mathcenter/), Tutoring Center (784-6801 or http://www.unr.edu/tutoring-center/), and University Writing Center (784-6030 or
Academic Dishonesty: Cheating, plagiarism or otherwise obtaining grades under false pretenses constitute academic dishonesty according to the code of this university. Academic dishonesty will not be tolerated and penalties can include canceling a student’s enrollment without a grade, giving an F for the course or for the assignment. For more details, see the UNR General Catalog.

Disability Services: Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the Disability Resource Center (Thompson Building Suite 101) as soon as possible to arrange for appropriate accommodations.

Taping class: Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may have been given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.