

GEOL 101 – Introductory Geology: Exploring Planet Earth, Section 001, Spring 2016

M-W 10:00 AM – 11:15 AM, WRI C144

Course Format: Lecture twice a week
Weekly laboratory

Required Textbook: Essentials of Geology by Marshak, 4th edition

Prerequisites: No university prerequisites

Purpose of this Class: This class is designed as an introduction to the physical characteristics and processes of the Earth. We will discuss the inter-relationship of people, society and the Earth in order to better understand our dependence on the finite resources of the planet and how we may live better with an awareness of Earth processes. This class will also convey an understanding of how Earth scientists utilize scientific principles to gain knowledge of the Earth.

Learning Outcomes: After successfully completing this course, students will be able to: 1) Identify common rocks and minerals and place them in the context of the rock cycle; 2) Locate major plate boundaries around the world, and identify the geological processes and features that may accompany those boundaries; 3) Explain the surface processes that have shaped the landscape over geologic time; and 4) Explain the origins and limitations of major renewable and nonrenewable resources.

Grading policy: Final grades will be assigned according to the following schedule. The instructor may also elect to curve the final grades in the students favor.

<u>Grade</u>	<u>Semester average</u>	<u>Grade</u>	<u>Semester average</u>
A	over 93	C	between 73 and 77
A-	between 90 and 93	C-	between 70 and 73
B+	between 87 and 90	D+	between 67 and 70
B	between 83 and 87	D	between 63 and 67
B-	between 80 and 83	D-	between 60 and 63
C+	between 77 and 80	F	less than 60 (see note 1 below)

Final Grades will be computed as follows:

Three lecture exams (15% each)	45%
Comprehensive final exam	20%
Lecture quizzes/assignments	10%
Laboratory	<u>25%</u>
	100%

Notes:

1. You **MUST** pass both the lecture and the laboratory in order to pass the course. A grade of F in lab or a grade of less than 60 in lecture will earn an F for the entire course regardless of the numerical average of the two scores.
2. Required reading means that you are responsible for knowing the assigned material. Your instructor may test you on that material even if it has not been covered in lecture.
3. No extra credit will be given.
4. No make-up exams, make-up quizzes, or make-up exercises will be given unless you provide a written medical, military, or university excuse. So plan to attend class.

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Date	Lecture Topic	Lab Topic	Required Reading (Marshak)
Week 1		No Lab	
Jan. 18	No Class: Martin Luther King Jr. Day Recess		
Jan. 20	Introduction, Syllabus, Scientific Method/Formation of the Earth		Prelude P.2, Chapter 1
Week 2		Course Introduction/Physical Properties	
Jan. 25	Structure of the Earth/Minerals		Chapter 1, Chapter 3
Jan. 27	Minerals		Chapter 3
Week 3		Mineral Identification	
Feb. 1	Rock Cycle		Interludes A, C
Feb. 3	Igneous Rocks		Chapter 4
Week 4		Igneous Rocks	
Feb. 8	Igneous Rocks		Chapter 4
Feb. 10	Volcanism		Chapter 5
Week 5		Optional Mineral/Rock Identification Practice	
Feb. 15	No Class: Washington's Birthday Recess		
Feb. 17	Exam 1 (Chapters 1,3,4,5, Prelude P.2, Interludes A, C)		
Week 6		Mineral and Igneous Rock Identification Quiz	
Feb. 22	Sedimentary Rocks/Weathering		Interlude B.2
Feb. 24	Weathering/Metamorphic Rocks		Chapter 7
Week 7		Sedimentary Rocks	
Feb. 29	Metamorphic Rocks		Chapter 7
Mar. 2	Geologic Time		Chapter 10
Week 8		Metamorphic Rocks	
Mar. 7	Geologic Time		Interlude E
Mar. 9	Exam 2 (Chapters 6,7,10, Interludes B.2, E)		mid-semester grades due 3/12
Week 9		Rock Exam	
Mar. 14	Rivers		Chapter 14, Interlude F
Mar. 16	Groundwater		Chapter 16
Spring Break March 21 - 26			
Week 10		Groundwater	
Mar. 28	Wind and Deserts		Chapter 17
Mar. 30	Mass Wasting	Apr. 1st, final date to withdraw	Chapter 13
Week 11		Topographic Maps	
Apr. 4	Earthquakes		Chapter 8
Apr. 6	Earth's Interior		Interlude D
Week 12		Earthquakes	
Apr. 11	Geologic Structure/Geologic Maps		Chapter 9
Apr. 13	Exam 3 (Chapters 8,14,16,17, 13, Interlude D)		
Week 13		Field Trip	
Apr. 18	Geologic Structure/Geologic Maps		Chapter 9
Apr. 20	Tectonics		Chapter 2
Week 14		Geologic Structure	
Apr. 25	Energy		Chapter 12
Apr. 27	Natural Resources		Chapter 12
Week 15		Applied Geology in Southern Nevada	
May. 2	Glaciers		Chapter 18
May. 4	Instructors choice (TBA)		Chapter Unknown
Week 16	FINAL EXAM		Monday May 9th 10:10 AM – 12:10 pm

Changes to Syllabus: The above lecture schedule is tentative; adjustments to the schedule of topics and reading assignments may be made in accordance with the rate of progress in the classroom. The instructor also reserves the right to change a lecture topic to reflect world events. Students will be provided with an updated syllabus if significant changes are necessary.

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Logistics and Policies

1. Participation - Students in this class will have different backgrounds and levels of educational training. As a result, you may find some material difficult, feel that you are already familiar with some of the concepts, or have personal experiences that can inform us all. Whatever your situation, please share your position with us through class participation. Most importantly, however, if you are confused about a concept, **please ask questions** in class for clarification and further explanation. You will not be alone in your confusion. There are many ways to present this material, and I will attempt to find one that works for you. If you do not feel comfortable asking questions in class, please contact your lab instructor or myself.

2. Attendance - It is important that you attend class daily because we cover a lot of material, and I will provide guidance for reading assignments and exam questions regularly. You are responsible for all material covered in lectures no matter what causes your absence. If you miss a lecture, get the notes from a classmate. Topics covered may vary from the schedule somewhat, but the exam dates will remain fixed. If you are absent from a scheduled exam in either lecture or lab without a written medical, military, or university excuse, you will receive a zero for that exam. If a make-up exam is required due to the excuses listed above, the nature of the make-up exam will be at the instructors' discretion. The final exam is required of all students.

3. Religious Holidays - Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

4. Official Extracurricular Activity - All students who represent UNLV at any official extracurricular activity have the opportunity to make up an assignment. However, you must provide official written notification to me at least 1 week prior to the missed class(es).

5. Laboratory - Concurrent enrollment in a laboratory section is required. You must enroll in a laboratory section of GEOL 101 for zero credit hours. The lab is 25% of your final grade, **but if you fail the lab, then you will fail the entire course. Also, if you miss three lab sessions or fail to turn in three lab assignments or some combination of the two you will fail the lab.** Required field trips will be held during your lab meeting. If you are enrolled in a night lab, the field trips will be held on Saturdays or Sundays. Talk to your lab instructors about these and plan accordingly.

6. First week schedule - Unless stated otherwise on the course syllabus, the GEOL 101 laboratory meets the first week of each semester. **If you miss the first week of laboratory for any reason, including a university holiday, you must make arrangements to complete the first laboratory assignment before attending the second laboratory session.**

7. Learning Environment - The classroom is intended to be a place of learning. As such, and as specified in the UNLV Undergraduate Catalog, no pagers, cell phones, or other potentially disruptive devices are allowed in either lecture or laboratory. Student usage of laptop computers, recording equipment, or similar devices is only allowed with explicit permission of the instructor, and is restricted to taking notes for this course. Disruptive behavior including, but not limited to those described above, chatting, sleeping, watching video, playing games or texting may result in an administrative withdrawal from the course.

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8. Administrative Drops/Classroom Conduct - You are required to be familiar with university policies and procedures in the current UNLV Undergraduate Catalog. Importantly, we follow the policies on Administrative Drops/Classroom Conduct as stated in the most recent UNLV Undergraduate Catalog. Any student that does not comply with these requirements, and conducts themselves in a manner that is disruptive and interferes with the right of other students to learn, or of the instructor to teach will be administratively dropped from the course.

9. Non-enrolled guests - Students are not allowed to bring guests, including children to either lecture or laboratory.

10. Academic Misconduct - Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at: <https://www.unlv.edu/studentconduct/student-conduct>.

This course operates under a "zero tolerance" policy, meaning that **if a student commits cheating or plagiarism they will receive a grade of F for the class.**

11. Disability Resource Center (DRC) - The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-985-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you.

If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that we may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

12. Incomplete Grades - The grade of I – Incomplete – can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

13. Writing Center - One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>

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14. Transparency in Learning and Teaching - The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information:

<https://www.unlv.edu/provost/teachingandlearning>

<https://www.unlv.edu/provost/transparency>

15. Tutoring and Coaching - The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit <http://www.unlv.edu/asc> or call 702-895- 3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of the SSC (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TEB second floor.

16. Copyright Issues - The University requires all members of the University Community to familiarize themselves **with** and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at:

<http://www.unlv.edu/provost/copyright>.

17. Rebelmail - By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. **Emailing within WebCampus is acceptable.**

18. Library Resources - Students may consult with a librarian on research needs. For this class, the subject librarian is https://www.library.unlv.edu/contact/librarians_by_subject. UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu/>

19. Final Examinations - The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at:

<http://www.unlv.edu/registrar/calendars>.