

GEOL 100: Natural Disasters, Spring 2016
Section 1001 (23975), Mon/Wed 11:30-12:45am, Wright Hall (WRI) C148

Faculty: Dr. Gabriel Judkins
116 LFG
895-4302
Email: gabriel.judkins@unlv.edu
<http://geoscience.unlv.edu/gabrielljudkins.html>

Office Hours: Monday 1:00-2:00pm, Tuesday 11:00-12:00 PM, and by appointment

Course Format: Lecture twice a week

Required Textbook: *Natural Hazards: Earth's Processes as Hazards, Disasters, and Catastrophes*, Keller, Edward A. and Duane E. DeVecchio

Prerequisites: No university prerequisites

Purpose of this class:

This course is designed for anyone with an interest in natural catastrophic events and a desire to learn more about how the physical environment functions (particularly with regard to the hazards presented by cataclysmic natural disasters). During this semester we will focus on impending disasters, potential planet-altering events, and the way that society has responded in the past and may respond in the future to natural disasters. Topical areas of particular focus will comprise those disasters with a potential for occurrence in the Western US, including: volcanoes, earthquakes, wildfires, flooding droughts, and rapid anthropogenic-driven climate change. The course will wrap up with an assessment of personal and local preparedness in the face of potential future disasters.

Learning outcomes of this class:

- Identify the locations in the United States that are subject to the major hazards (earthquakes, volcanic eruptions, tsunamis, floods, landslides, extreme weather, and wildfires) and explain the basic earth processes involved in these natural events
- Evaluate the potential and risks for the occurrence of the afore listed majors hazards by accessing and interpreting available hazard maps available from government agencies
- Demonstrate practical knowledge with regard to preparing for potential disasters at home and in the community
- Model the ability to share knowledge with the general public about risks from natural events and human-induced hazards

Grading Policy

Final grades will be assigned according to the following schedule.

Grade	Semester average	Grade	Semester average
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

Final grades will be computed as follows:

Three exams	300 pts
Final exam (non-comprehensive)	<u>100 pts</u>
Total points	400 pts
(Bonus: In-class exercises)	20 pts

- Notes:** 1. No extra credit will be given
 2. No make-up exams, make-up quizzes, or make-up exercises will be given unless you provide a written medical, military, or university excuse. Plan to attend all classes.

Changes to syllabus: The attached lecture schedule is tentative; adjustments to the schedule of topics and reading assignments may be made in accordance with the rate and 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 (i.e. modifications to the schedule of exams).

Class schedule

Date	Lecture Topic	Required Reading
Week 1		
Jan. 18	Martin Luther King Jr. Day (No Class)	
Jan. 20	Course Introduction/Introduction to Natural Hazards	Chapter 1
Week 2		
Jan. 25	Introduction to Natural Hazards	
Jan. 27	Internal Structure of Earth and Plate Tectonics	Chapter 2
Week 3		
Feb. 1	Internal Structure of Earth and Plate Tectonics	
Feb. 3	Earthquakes	Chapter 3
Week 4		
Feb. 8	Earthquakes	
Feb. 10	Tsunamis	Chapter 4
Week 5		
Feb. 15	Washington's Birthday (No Class)	
Feb. 17	Tsunamis/Video: <i>Tsunami</i>	
Week 5		
Feb. 22	Exam 1 (Chapters 1-4)	
Feb. 24	Volcanoes	Chapter 5
Week 6		
Feb. 29	Volcanoes	
Mar. 2	Flooding	Chapter 6
Week 7		
Mar. 7	Flooding	
Mar. 9	Mass Wasting	Chapter 7
Week 8		
Mar. 14	Mass Wasting	
Mar. 16	Exam 2 (Chapters 5-7)	
Week 9		
Mar. 21	Spring Break (No Class)	
Mar. 23	Spring Break (No Class)	

Week 10		
Mar. 28	Atmospheric Processes and Severe Weather	Chapter 9
Mar. 30	Atmospheric Processes and Severe Weather	
Week 11		
Apr. 4	Hurricanes and Extratropical Cyclones	Chapter 10
Apr. 6	Hurricanes and Extratropical Cyclones	
Week 12		
Apr. 11	Coastal Hazards	Chapter 11
Apr. 13	Coastal Hazards	
Week 13		
Apr. 18	Exam 3 (Chapters 9-11)	
Apr. 20	Climate and Climate Change	Chapter 12
Week 14		
Apr. 25	Climate and Climate Change	
Apr. 27	Wildfires	Chapter 13
Week 15		
May 2	<i>Video: Firewars</i>	
May 4	Impacts and Extinctions	Chapter 14
Week 16	Final Exam (Chapter 12-14)	Wed. May 11th 10:10-12:10pm

UNLV 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 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 me.
- 2. Attendance** —It is important that you attend class daily because we cover a lot of material, and I will provide guidance for exam questions during class. You are responsible for all material covered in lectures and assigned for readings. Topics covered may vary from the schedule somewhat, but the exam dates will remain fixed. Consult the posted lecture materials and fellow classmates to review missed material and then see me with specific questions. Make-up lectures and exams will not be given without a medical, military, or university excuse. If a make-up exam is permissible, the nature of the make-up exam will be at my discretion.
- 3. 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>.
- 4. 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 Cheating, Plagiarism, and Academic Dishonesty that are 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.
- 5. Recording Lectures** — Absolutely **no electronic recoding or posting** of lectures or other materials will be allowed without my prior approval

6. **Bringing children/guests to class** — Students are not generally allowed to bring guests, including children to lecture. Please see me with any questions.
7. **Disability Resource Center (DRC)** — The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) 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 you 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.
8. **UNLV 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 702-895-3908. 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/>.
9. **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.
10. **Religious Holidays Policy** — 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>.
11. **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 written notification to me at least 1 week prior to the missed class(es).

- 12. Nondiscrimination** —The University of Nevada Las Vegas does not discriminate on the basis of race, color, creed, religion, national or ethnic origin, gender, age, sexual orientation, disability, or veteran status.
- 13. Copyright** 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>.
- 14. 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.**
- 15. 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.
- 16. 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>.
- 17. 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/>

18. 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>