

GEOL 120 – Natural Disasters
TR 10:00 AM – 11:15 AM, Room TBE A107

Instructor: Dr. Catherine Snelson
LFG 204
895-2916
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Office Hours: Tuesdays and Wednesdays 2:30 – 3:30 pm. I also maintain an “open-door” policy in which you may stop in at any time to discuss any issues with the course. If you wish you may request an appointment.

Course Format: Lecture twice a week

Required Textbooks: **Lecture:** *Natural Disasters* 5th edition by P. L. Abbott, ISBN 0-07-282681-9 and *Natural Disasters Workbook* by Johnson et al.

Online Materials: WebCampus: <https://webcampus.nevada.edu/webct/entryPage.doweбct>
Textbook Supplement: http://highered.mcgraw-hill.com/sites/0072826819/student_view0

Purpose of this Class:

This class is designed as an examination of natural disasters and their causes, effects, and possible mitigation. This course will cover basic geology concepts to better understand natural disasters. Through class participation, we will discuss the inter-relationship of people, society and the Earth in order to understand better our awareness of Earth processes and mitigation. This class will also convey an understanding of how Earth scientists utilize scientific principles to understand natural disasters and how to approach mitigation.

Grading:

| | |
|-----------------------------|-----------|
| Four exams | 15 % each |
| In-Class Exercises & Videos | 5 % |
| Homework | 5 % |
| Disaster Log | 10 % |
| Movie Papers | 10 % each |

- A: 90 - 100 – *‘‘Excellent knowledge of concepts and/or techniques together with a high degree of skill and/or some elements of originality in satisfying the requirements of a piece of work or course.’’
- B: 80 – 89 – *‘‘Good level of knowledge of concepts and/or techniques together with a considerable skill in using them in satisfying the requirements of a piece of work or course.’’
- C: 70 -79 – *‘‘Acceptable level of knowledge of concepts and/or techniques together with some skill in using them to satisfy the requirements of a piece of work or course.’’
- D: 60 – 69 – *‘‘Minimum knowledge of concepts and/or techniques needed to satisfy the requirements of a piece of work or course.’’
- F: Below 60 – Failing

*Grade descriptions from http://www.cse.yorku.ca/course_archive/2001-02/W/3461/M/LetterGrading.htm

- Notes:** 1. No extra credit will be given.
2. No make-up exams, make-up quizzes or make-up exercises will be given. All such items have been scheduled so plan to attend class.

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Logistics and Policies

1. Participation

I expect that students will come to this class with very 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 a variety of learning styles and I will attempt to present the material in ways that will be effective for all of you. If you do not feel comfortable asking questions in class, please see me after class, during office hours, via e-mail, or post a message in the anonymous section of the WebCampus course site. From time to time I will be having you break into small groups during class. The purpose of this is to foster dialogue and critical thinking about many of the topics we will cover. I urge you to make the most of these group exercises to get to know your classmates and to gain the perspective of others on the issues we will be discussing.

2. WebCampus

In this class I will be utilizing WebCampus (<https://webcampus.nevada.edu/webct/entryPage.dowebct>) to provide online access to lecture notes, exercises, and exam reviews and also your grades. You will find WebCampus to be an essential complement to the course; however it is not a substitute for regular class attendance. **Some exercises will be required to be completed on WebCampus, so I you need to regularly access the course site and see the resources that are available.** It is YOUR responsibility to verify that any online materials have been completed and properly submitted. Otherwise there will not be a grade for that assignment and you may not receive full credit.

3. 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 the notes can be retrieved from WebCampus. **Neither make-up lectures nor make-up exams will be given** except as specified below. Topics covered may vary from the schedule somewhat, but the exam dates and dates where exercises have been scheduled remain fixed. If you are absent from a scheduled exam in lecture or in-class exercise without a written medical, military, or university excuse, you will receive a zero for that exam or exercise.

4. Privacy

Under the Family Educational Rights and Privacy Act (FERPA) your quiz, exam and final grades are confidential unless you have specified, in writing, that others are granted access to such information. **I do not give out grades via telephone or e-mail.** In addition please do not ask to collect any graded material for any of your classmates.

5. Cheating, Plagiarism, and Academic Dishonesty

You are required to be familiar with university policies and procedures in the current UNLV Undergraduate Catalog. (Fall 2006 – Spring 2008). Those policies are outlined in the section on Student Academic Misconduct (p. 63-66). In the hopes of deterring incidents of cheating and/or plagiarism this class employs a "zero tolerance" policy meaning that if a student commits cheating or plagiarism they receive a grade of F for the class and a notation may be added to your transcript to indicate academic misconduct. In addition, I will initiate a disciplinary review under procedures described in the University and Community College System of Nevada document Rules and Disciplinary Procedures for Members of the University Community.

6. Disability Resource Center

The Disability Resource Center (DRC) coordinates all academic accommodations for students with documented disabilities. UNLV complies with the provisions set forth in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, offering reasonable accommodations to qualified students with documented disabilities. If you have a documented disability that may require accommodations, you will need to contact the DRC for the coordination of services. The DRC is located in the Student Services Complex (SSC), Room 137, and the contact numbers are: VOICE (702) 895-0866, TTY (702) 895-0652, FAX (702) 895-0651. For additional information, please visit: <http://studentlife.unlv.edu/disability/>. If the DRC contacts me regarding any accommodations you may need I assure you that confidentiality will be maintained.

7. Religious Holidays

As a general rule, a student missing a class or assignment because of observance of a religious holiday shall have the opportunity to make up missed work. You must notify me, by the third week of classes, if this pertains to you and a clear deadline will be set for completion of work.

8. 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.

9. 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).

10. Learning Environment

The classroom is intended to be a place of learning. As such, and as specified in the UNLV Undergraduate Catalog under Classroom Conduct (p. 67), I ask that no pagers, cell phones, or other potentially disruptive devices are to be used during lecture. These devices should be turned off or turned to the “silent mode”. Any other activities which disrupt the class or interfere with the learning experience of others will not be tolerated. If these guidelines are not followed I may, as outlined in the University Catalog, initiate an administrative drop.

11. Copyright

The University requires all members of the University Community to familiarize themselves 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. To familiarize yourself with copyright and fair use policies, you are encouraged to visit the following website: <http://www.unlv.edu/committees/copyright/>

12. Succeeding!

- a. Observe the world around you.
- b. Show up (The ones that do the best in the class are those that attend regularly)
- b. Show up on time (Not 30 minutes late)
- d. Show up prepared (Showing up to an exam without a pencil is an example of not being prepared.)
- e. Turn off or silence your cell-phone/pager/other noisy device (It is annoying).
- f. Pay attention (No chit-chat with your neighbor about weekend exploits. Those around you don't care)
- g. Ask questions and participate
- h. Review/compare notes
- i. Utilize web resources
- j. Do your own work
- k. Use office hours (Not just before the final exam).

Changes to Syllabus:

The following 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. **Keep in mind that ANYTHING in the chapters is fair game for exam questions, not just what I present in lecture. It is in your best interest to actually read the text, assignments and use WebCampus.**

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CLASS SCHEDULE

| Wk | Date | Lecture Topic | Readings | Assignments |
|----|---------|--|-----------|---|
| 1 | Jan. 16 | Introduction; Earth as a System | Ch. 1-2 | |
| | Jan. 18 | Plate Tectonics | Ch. 3 | PT Video |
| 2 | Jan. 23 | Plate Tectonics | Ch. 3 | PT In-Class Exercise |
| | Jan. 25 | Earthquake Geology, Seismology and Tsunami | Ch. 4 | PT Homework Due |
| 3 | Jan. 30 | Seismology and Tsunami | Ch. 4 | TSU Video |
| | Feb. 1 | Earthquakes | Ch. 4 | EQ Video; TSU Homework Due |
| 4 | Feb. 6 | Exam I (Ch. 1-4, Assignments) | | |
| | Feb. 8 | Earthquakes Around the World | Ch. 5 | EQ In-Class Exercise |
| 5 | Feb. 13 | Earthquake Mitigation | Ch. 6 | EQ Effects Homework Due |
| | Feb. 15 | Volcanic Eruptions | Ch. 7 | |
| 6 | Feb. 20 | Volcanic Eruptions | Ch. 7-8 | VO Video |
| | Feb. 22 | Volcanic Hazards | Ch. 8 | VO Homework Due; VO In-Class Exercise |
| 7 | Feb. 27 | Exam II (Ch. 5-8, Assignments) | | |
| | Mar. 1 | Atmosphere, Oceans, and Long-Term Climate Change | Ch. 10 | |
| 8 | Mar. 6 | Climate Change | Ch. 10-11 | WE Homework Due |
| | Mar. 8 | Climate Change and Severe Weather | Ch. 11 | Draft Disaster Log Due; WE In-Class Exercise |
| 9 | Mar. 13 | Spring Break – No Class | | |
| | Mar. 15 | Spring Break – No Class | | |
| 10 | Mar. 20 | Floods | Ch. 13 | Movie Paper #1 Due |
| | Mar. 22 | Floods | Ch. 13 | FL Video; FL Homework Due (p. 85) |
| 11 | Mar. 27 | Exam III (Ch. 10-11, 13, Assignments) | | |
| | Mar. 29 | Hurricanes and the Coastlines | Ch. 12 | HU Video |
| 12 | Apr. 3 | Hurricanes and the Coastlines | Ch. 12 | |
| | Apr. 5 | Hurricanes and the Coastlines | Ch. 12 | HU In-Class Exercise; CH In-Class Exercise #2 |
| 13 | Apr. 10 | Hurricanes and the Coastlines | Ch. 12 | HU/CH Homework Due |
| | Apr. 12 | Mass Movements | Ch. 9 | |
| 14 | Apr. 17 | Mass Movements | Ch. 9 | MM Video |
| | Apr. 19 | Mass Movements | Ch. 9 | MM In-Class Exercise #1; MM Homework Due |
| 15 | Apr. 24 | Mass Extinction | Ch. 15 | ME In-Class Exercise |
| | Apr. 26 | Mass Extinction | Ch. 15 | ME Video; ME Homework Due |
| 16 | May 1 | Impacts | Ch. 16 | Disaster Log Due; IM In-Class Exercise |
| | May 3 | Impacts | Ch. 16 | IM Homework Due; IM Video |
| 17 | May 8 | FINAL EXAM – 10:10 am (Ch. 9, 12, 15-16, Assignments) | | Movie Paper #2 Due |