

GEOLOGY 357 – Urban Geology

Spring Quarter 2008 (11278, SEC 1)

Hours: T & Th 6:10 – 7:50 PM

Room: PS 223

Webpage: www.calstatela.edu/faculty/sleyva

Instructor: Sonjia Leyva

Office: PS 221, 323-343-2149

Office Hours: T & Th 5:30 -6:00 PM

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Course Description: The geologic conditions and processes that affect the urban environment are examined with emphasis on the Los Angeles area. Urban planning to avoid geological hazards is investigated. Time requirements: Lecture 4 hours, plus additional time for studying, research, and assignments. Fulfills 4 units in Theme D of the GE Requirements.

Course Objectives: Students learn via lectures, reading assignments, and videos about the geologic processes, hazards and resources which affect the urban environment. In addition, students will learn to use government resources and the Internet to investigate the geological setting of their own home and to create a report on their findings.

Text & Materials: There is no text for this class. Instead, you will be responsible for reading articles dealing with current events and presenting your finding to the class, in addition to handouts & videos. Several In-Class-Discussions may be given throughout the quarter covering topics discussed in the lecture or the required reading.

Tentative Schedule

WEEK	DATE	TOPIC
1	3/25	Introduction
	3/27	Population & Urbanization
2	4/1	Volcanoes
	4/3	
3	4/8	Earthquakes
	4/10	
4	4/15	Flooding
	4/17	
5	4/22	Video: Three Gorges Dam
	4/24	Midterm Exam
6	4/29	Coastal Hazards & Tsunami Video
	5/1	
7	5/6	Mass Wasting
	5/8	EXTRA CREDIT EQ Kits due!
8	5/13	Natural Resources
	5/15	Home Evaluation Project due!
9	5/20	Climate Change
	5/22	
10	5/27	Student Presentations - <u>Last day to turn in extra credit</u>
	5/29	
11	6/3	FINAL EXAM! 7:30 p.m. - 10: 00 p.m

REQUIREMENTS

Exams (100 points each) - There will be two exams - one midterm and one final; each exam is worth 100 points. Make-up exams will be given only to those who can verify a valid excuse for missing an exam. The make-up will be given at a time that is mutually agreeable to both the student and myself, but must be arranged prior to the initial exam. **Failure to take the make-up exam within two weeks of the original exam date will result in the missed exam counting in as a zero.** In addition, the exam question sheet must be returned to me after the exam and after the exam review. Failure to do so will result in a ten (10)-point reduction in the student's grade for that exam.

Presentation (100 points) – Each student is required give a 15 - 20 minute presentation on an Urban Geology topic during the last week of the quarter. Guidelines and topic choices for these presentation are outlined on the attached pages. **Late submissions will not be accepted**

Home Evaluation Project (100 points) - There is a writing assignment for this course. You will be expected to do a complete geologic hazard evaluation of your home and its location. **Please refer to your syllabus for the due date. Late reports will not be accepted!**

Class Attendance (50 points) Your thoughts and opinions are important. As such, you should plan on bringing your questions, comments, and opinions to each and every class session and be prepared to discuss the topic of the evening. Attendance will be taken at every class meeting.

Internet Access - Internet access is suggested for this class because much of the course content will be posted on the class web site, www.calstatela.edu/faculty/sleyva. Access at home or work is fine as long as you can view the web pages regularly and have a reasonably fast connection. If you don't have access at home or work, you can get free access through an account here at Cal State LA. To get a computer account at Cal State LA, go to the Academic Technology Support (ATS) Office in (basement) King Hall D140. You will need identification and proof of registration.

METHODS OF EVALUATION

Total possible class points will come from the following assignments:

	Points possible	Total Points Possible	% of grade
Exams	2 tests @ 100 points each	200	50.0%
Student Presentation	100 points	100	25.0%
Home Evaluation Project	100 points	100	25.0%
		400	100.0%

You may do up to 15 points of extra credit work to raise your total points earned. **All extra credit is due the last day of class – not the day of the final!** Your grade is based on your percentage score out of 400 points. Grades will be assigned using + and - (i.e., B+, B or B-). our grades will be available on the class website, www.calstatela.edu/faculty/sleyva/grades/index.html.

A = >90%	>360.0 points
B = 80-89%	320.0 – 359.9 points
C = 70-79%	280.0 – 319.9 points
D = 60-69%	240.0 – 279.9 points
F =< 60%	<240.0 points

Your grades will be available on the class website, www.calstatela.edu/faculty/sleyva/grades/index.html.

Want to get a good grade? Here's how:

1. Attend every class.
2. Take notes and review them after class and before exams.
3. Read your textbook / do the assignments
4. Turn in all work on time
5. Ask questions.
6. You are responsible for studying.

UNIVERSITY & DEPARTMENT POLICIES (a.k.a. the “fine print”)

Statement of Reasonable Accommodation:

The Department of Geological Sciences faculty members fully support the Americans with Disabilities Act (ADA). The members of the faculty will provide reasonable accommodation to any student with a disability who is registered with the Office of Students with Disabilities (OSD) who needs and requests accommodation. The faculty may wish to contact the OSD to verify the presence of a disability and confirm that accommodation is necessary. The OSD will arrange and provide for the accommodation. Reasonable accommodation may involve allowing a student to use an interpreter, note taker, or reader; accommodation may be needed during class sessions and for administration of examinations. The intent of the ADA in requiring consideration of reasonable accommodation is not to give a particular student an unfair advantage over other students, but simply to allow a student with disability to have an equal opportunity to be successful.

● Student Conduct:

- Student conduct is viewed as a serious matter by the faculty members of the Department of Geological Sciences. The Department faculty members assume that all students will conduct themselves as mature citizens of the campus community and will conduct themselves in a manner congruent with university policies and regulations. Inappropriate conduct is subject to discipline as provided for in Title 5, California Code of Regulations (see student conduct: rights and responsibilities, and student discipline, CSULA General Catalog). Academic honesty is expected of all students in the Department, in accordance with University policy. There are established university reporting procedures if a student is suspected of committing an academically dishonest act.
- The University has a clearly defined policy on Academic Honesty. This policy will be enforced in this class. Cheating and plagiarizing will not be tolerated. Students caught plagiarizing and/or cheating will be subject to the consequences and set forth in the University Catalog, Appendix D - Academic Honesty. You can access it online at: <http://catalog.calstatela.edu>

- **Make-up exams:** Make-up exams will be given only to those who can verify a valid excuse for missing an exam. The make-up will be given at a time that is mutually agreeable to both the student and myself, but must be arranged prior to the initial exam. **Failure to take the make-up exam within two weeks of the original exam date will result in the missed exam counting in as a zero.**

● Grading:

- University policy allows a grade of incomplete to be given only to those who have been sick, injured, or have a similar valid excuse. A grade of “incomplete” will not be given after poor performance in the course.
- If you are repeating any Cal State L.A. course in order to remove a D or an F from your transcript, you must file an academic renewal petition in Administration 101 no later than the last day to add a class. Instructions for doing this may be found under “Academic Renewal” in your Schedule of Classes.
- University policy requires that all students shall be graded in *exactly* the same fashion. What does this mean? **You may not ask for extra assignments or to repeat an exam to improve your grade, or additional assignments after the course is completed.**

- **Avoid the hassles. Take the Writing Proficiency Examination (WPE) after you have completed your English Composition and prior to the completion of 135 units in order to avoid a registration hold. The dates for the WPE are published in the Schedule of Classes. Enroll by registering in UNIV 400 and paying the \$15 exam fee. Do it now!!!**

Student Presentations

Scoring:

- | | |
|---|------------------------|
| Good (all criteria met or exceeded) | = full points |
| Fair (most criteria met, a few mistakes) | = ½ of possible points |
| Poor (few criteria met, lots of mistakes) | = ¼ of possible points |
| None (not done) | = no points |

	Points possible
Accuracy of content (30 points)	
Understanding of material being presented	10 points
Quality of research	10 points
Accuracy of material being presented	10 points
Visual quality of presentation (30 points)	
Text easy to read and not cluttered	10 points
Quality of images or props	10 points
Logical flow of ideas	5 points
Stays within time limits (-½ point for each minute over/under)	5 points
Quality of presentation (30 points)	
Delivery (speaks clearly, not rushed, pronounces words correctly)	10 points
Speaks to class, not to the projection screen	10 points
Material relevant to topic	10 points
Class Evaluations (Average of all evaluations - 10 points)	10 points
	Total: 100 points

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Student Presentation Evaluation

Name of Evaluatee: _____

Presentation: _____

On a scale of 1 to 10 (1 is the worst, 10 is the best), rate the quality of the presentation : _____

Comments:

Presentation Topic Ideas

1. Choose one of the following volcanoes and do a brief presentation on the volcano, its history, and the threat it poses to the nearby communities
 - a. Popocatepetl, Mexico
 - b. Merapi, Indonesia
 - c. Nyiragongo, Congo
 - d. Sakura-jima, Japan
2. How volcanoes are monitored
3. Current eruptions (must include at least 5 volcanoes, type of eruption, threat posed to nearby communities, and the eruptive history for each)
4. Current research on earthquakes/seismology
5. Choose one of the following earthquakes and do a brief presentation on the earthquake, its effects on the nearby communities, lessons learned, and the potential for it happening again
 - a. 1812 New Madrid Earthquake
 - b. 1976 Tangshan, China Earthquake
 - c. 1985 Mexico City Earthquake
 - d. Student's choice of recent earthquakes in Turkey or the Middle East (last 10 years)
6. Seismic risk in the Pacific Northwest
7. Tsunami risk for Southern California
8. Global Warming and the potential for coastal inundation world-wide
9. Flooding issues / mitigation for one (or more) of the following cities:
 - a. London, England
 - b. Paris, France
 - c. Hong Kong, China
 - d. Amsterdam, The Netherlands
 - e. Vancouver, British Columbia, Canada
 - f. Student Choice
10. What happens when we flush?
11. How do we get our electricity?
12. What happens after the garbage truck takes away our garbage?
13. Choose ONE of the following natural resources and discuss the following: 1) how it is obtained, processed, and transported; 2) what it can be used for; and 3) how the natural resource affects the country of origin (ie, environmental effects, economic benefits, etc.)
 - a. Petroleum
 - b. Plastics
 - c. One (or more) of the following minerals: copper, chromite, talc, barites, sulfur, lead, zinc, iron ore, phosphates, uranium, feldspar, gold, bauxite, or manganese.
 - d. precious and semiprecious stones
 - e. Sand, gravel, stone
 - f. Timber
 - g. Fish/marine animals