Geology 1405: Geologic Hazards and Resources

Fall 2017

Instructor: Dr. Pat Harris Office: LDB 312

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Office Hours: Wednesday 2:00pm - 3:00pm, Tue 2:00pm - 3:00pm, by appointment,

or anytime I'm around my office.

Course Information

Location: LDB 213 **Time:** TTH 9:30-10:50

Required Texts:

- 1. Natural Hazards Earth's Processes as Hazards, Disasters, and Catastrophes. **3**rd **or 4**th Ed., Keller, E.A., and DeVecchio, D.E., **2011 or 2014**. Pearson.
- <u>2.</u> Lab manual: <u>Geologic Hazards and Resources</u>. Netoff, D. I., Baldwin, C., Cooper, B., and Torrez, B., 2006. The Start Group.
- 3. Supplemental Readings as Assigned

Course Description

This class is an introduction to Geologic Hazards and Resources. The class will examine how geologic and natural processes affect society in terms of natural disasters and resource exploitation.

Grading

There are 550 total points available for the lecture. Your grade will be based on your performance on three lecture exams, ~13 quizzes of which the top 10 will count toward your grade (administered through Blackboard), and a comprehensive final exam. Exams may include any of the following: multiple choice, true/false, identification, and short answer based on lectures and reading assignments.

Each lecture exam will be worth 100 points. Quizzes will be worth 10 points each for a total of 100 points. The final exam will be comprehensive and worth 150 points. There will be no extra credit and no curve in the course.

Semester exams (3 X 100 pts)

Final exam

Online Quizzes (10 X 10 pts)

300 pts

150 pts

100 pts

Total Lecture 550 pts

Laboratory grades will count as 25% of the total grade. The laboratory average will be multiplied by 0.25 and the lecture average will be multiplied by 0.75. For example, if one receives a 74% ave. in lecture and a 93% ave. in lab. To calculate the average for the course, take $74\% \times 0.75 = 55.5$ and take $93\% \times 0.25 = 23.25$. Add the results 55.5 + 23.25 = 78.75% average for the course.

Exam Policy and Important Class Dates

Exams will be given during the class period on the dates listed below. Do not miss an exam! There are **NO MAKE-UP EXAMS.** If you miss an exam, then I will take the percentage grade that you earn on the final exam and count that for **ONE EXAM** grade that you miss. **EVERYONE MUST TAKE THE FINAL EXAM.**

Exam 1: September 19th **Exam 2:** October 17th **Exam 3:** November 14th

Final Exam: Thursday, Dec. 7th 9:30am - 11:30am

Grading Scale:

$$A = 90 - 100\%$$
 $B = 80 - 89\%$ $C = 70 - 79\%$

$$D = 60 - 69\%$$
 F = 59% and below

Online Quizzes

Quizzes will come directly from reading assignments and lecture material. Please complete the reading assignments prior to attempting the online quizzes. Quizzes will be posted to Blackboard each Monday or Tuesday and will close each Sunday at 11:30 pm. You may access the quiz by logging into Blackboard at:

https://shsu.blackboard.com

Academic Honesty

I expect you to fulfill your academic obligations through honest and independent effort. If I have sufficient reason to believe you are cheating on any graded work in this course, you will be dropped from the course with a failing grade. You may refer to the SHSU Academic Policy Manual, student section, Policy #810213 for specific language.

Students with Disabilities Policy:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf

Class Policies on Attendance/Behavior

The university requires that I take attendance for the course. *More than eight absences* (for any reason) will result in a failing grade for the course, regardless of your earned grade. Your attendance, motivation, and participation are integral to your success in this course. Regular attendance is by far the easiest way to achieve a good grade in this course. I implore you to attend each and every class and to actively participate.

I expect that you will act like adults. Disruptive behavior will not be tolerated. Please **turn cell phones off during class** and respect your peers.

If <u>you</u> decide to drop the course, it is <u>your</u> responsibility to fill out the necessary paperwork or you will receive a grade based upon your performance in the class regardless of the amount of work you completed.

Lecture Topics

Please Note The topics of lecture are in relative chronological order but are subject to change. The dates of the exams are set and the material to be covered will be clarified based on lecture topics completed.

	Lecture Topic	Reading/References
1	Introduction	Lecture, Chapter 1
2	Human Population	Lecture/Science Article
3	Earth Materials/Processes	Chapter 2
4	Plate Tectonics	Chapter 2
5	Earthquakes	Chapter 3
6	Tsunamis	Chapter 4
7	Volcanoes	Chapter 5
8	Mass Wasting	Chapter 7
9	Groundwater/Subsidence	Chapter 8
10	Flooding	Chapter 6
11	Global Climate Change	Chapter 12
12	Coastal Hazards/Hurricanes	Chapter 11, 10
13	*Mineral Resources	Lecture Notes
14	*Energy	Lecture Notes

May not get to these topics in the class