

Natural Disasters (GLY 4990/5990) Summer 2008

Lecture: Monday and Wednesday in 13/221, 8:30-11:50 a.m., May 26-July 2, 2008

This course will present the Earth processes that are responsible for natural disasters, such as volcanoes, earthquakes, hurricanes, and tsunami). We will evaluate the roles of humans (as individuals and populations) in creating disasters out of Earth events. GIS tools will be utilized to assess the effects/risks associated with various Earth processes, including hurricane inundation. Students will critically view popular films and other media to evaluate the accuracy of their presentation of Earth processes and events.

Professor	Office Hours
Dr. Matthew Schwartz	Monday: 12:00-2:00
Bldg 13/219	
office phone: 474-3469	and by appointment
e-mail: mschwartz@uwf.edu	

Prerequisites: Physical Geology and lab (GLY 2010/L)

or

Physical Geography (GEO 1200)

or

permission of instructor

Assignments: All assignments are due in class, in the corresponding eLearning dropbox, or in the professor's e-mailbox by 8:30 a.m. on the due date. Late assignments will be penalized at a rate of 1 grade per day, beginning at 8:31 on the due date (e.g., the maximum attainable grade for a paper either submitted via e-mail at 8:45 a.m. or brought into class late on the due date will be a B, rather than an A). **All written assignments will be subject to a plagiarism review via the Turnitin software package.**

Attendance Policy: All class meetings will begin promptly at the scheduled meeting time.

Students are expected to attend all scheduled class meetings, as lectures will provide important information that cannot be gained from other sources. The responsibility rests solely on the student to obtain any and all material presented during a missed period.

NOTE: If a student misses a scheduled laboratory section, alternative arrangements (i.e., extra lab meetings) may not be available.

eLearning material: Course material (including course notes, supplemental readings, and web links) may be supplied online via the eLearning service (<http://elearning.uwf.edu>).

Student Evaluation: A course grade will be assigned based on student performance in laboratories, exams, homework, and presentations (written and oral) as follows:

GLY 4990 Course Component		Grading Scale (per UWF Catalog 2005-6)		
Laboratory assignments (10)	25%	A	4.0	94-100%
Written report	15%	A-	3.7	90-93%
First exam	15%	B+	3.3	87-89%
Second exam	20%	B	3.0	83-86%
Final exam	25%	B-	2.7	80-82%
GLY 5990 Course Component		C+	2.3	77-79%
Laboratory assignments (12)	25%	C	2.0	73-76%
Written report and oral presentation(s)	15%	C-	1.7	70-72%
First exam	15%	D+	1.3	67-69%
Second exam	20%	D	1.0	60-66%
Final exam	25%	F	0.0	0-59%

Textbook (required): *Natural Hazards - Earth's Processes as Hazards, Disasters, and Catastrophes* (second edition), Edward A. Keller and Robert H. Blodgett (ISBN: 0-13-231864-4), with *Hazard City* CD-ROM (third edition), Hobart King, B.M. Carpenter, and Nicole D. Wilson. The text is available in the UWF campus bookstore and from various online distributors. Used copies are acceptable and *encouraged*. Supplemental readings from other sources may be assigned during the term.

ADMINISTRATIVE INFORMATION

Academic conduct: Expectations for academic conduct and classroom behavior are described on pages 46-7 in the UWF Student Life handbook available online at <http://www.uwf.edu/uwfmain/stuHandbk/>

Plagiarism Policy: Plagiarism is a serious offense and will not be tolerated under any circumstances. The course plagiarism policy will follow UWF and College of Arts and Sciences policies as described in <http://uwf.edu/cas/aasr/Plagiarism.pdf>. All written assignments will be subject to a plagiarism review via the Turnitin software package.

Special technology utilized by students: medium (personal computer, spreadsheet programs, calculator, maps, and similar).

Student Learning Outcomes: After successfully completing this course, students will be able to:

- Organize a project to result in presentation of a deliverable product.
- Present scientific data in both written and oral/visual formats.
- Discuss relationship between human/cultural actions and Earth processes/events.
- Critically evaluate the presentation of Earth processes in popular media.
- Utilize quantitative GIS technology to assess natural Earth process risks.

Students with Special Needs: The University's policies for students with special needs is described in the UWF Disabled Student Services publication available at http://uwf.edu/sdrc/dss_pub.pdf

Tentative Course Schedule: Please note that the following schedule is *tentative*; the instructor may add or delete material to meet the course objectives and student interest. All changes to this tentative plan will be recorded in an updated and amended syllabus that will be supplied to all students in class, via e-mail, or on the course website.

Date	Day	Topic and Content	Assignments (TENTATIVE)	Chapter
21 May	W	What is a Natural Disaster? Course introduction; Geology review	In-class: ESRI Earthquake 1 Homework: Obtain/read text book; complete ESRI earthquake 1	1
26 May	M	<i>No class - Memorial Day</i>	NA	NA
28 May	W	Earthquakes	In-class: Hazard City Earthquake Damage Assessment Homework: HC Earthquake	2
2 June	M	Earthquakes (cont.) <i>No lecture: Choctawhatchee Estuary Symposium</i>	In-class: ESRI Earthquake II	
4 June	W	Tsunamis	Homework: ESRI Tsunami module (5a)	3
9 June	M	Volcanoes	In class: ESRI Volcanoes Homework: Exam 1	4
11 June	W	Flooding	Exam 1 due in class In class: Hazard City Flood Insurance Rate Map Homework: ESRI Floods module (grad students)	5
16 June	M	Mass Wasting and Subsidence	Homework: ESRI Landslides module (grad students only)	6, 7
18 June	W	Weather and Hurricanes	Homework: Hazard City Shoreline Property Assessment	8, 9
23 June	M	Coastal Hazards	Homework: ESRI Storm Surge module (5b) Exam 2	10
25 June	W	Global Climate and Climate Change	Exam 2 due in class Homework: work on paper/presentation	11
30 June	M	Fire	Homework: finalize paper/presentation	12
2 July	W	Extraterrestrial Impacts and Extinctions; Presentations	Final Exam	13

NOTE: The schedule listed above is tentative and lecture topics are schedule to change at the instructor's discretion.