

Geology 3321: Geology for Engineers

Syllabus - Spring 2001

Section 24547

Instructor: Dr. Kate Miller

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Office Hours: Monday and Wednesday, 1 2:30-1:30; by appointment

Grading: 2 Hourly Exams (20% each), Final Exam (20%); Lab (40%)

Text: *Geology Applied to Engineering* by T. R. West

Web Site: http://www.geo.utep.edu/class_notes/Eng_Geo/index.html

Goals: To introduce applications of geology and geophysics to engineering and environmental problems. To provide a foundation in geology, so that engineering students will be able to talk knowledgeably with geologists and geophysicists or read geological reports that are pertinent to engineering projects. Emphasis in laboratories will be placed on practical engineering problems that require the use of geology and geophysics.

SCHEDULE*

<i>Week</i>	<i>Lecture Topic</i>	<i>Lab Topic</i>
<i>Jan. 15</i>	Chapter 1: Plate Tectonics	No Lab
<i>Jan. 22</i>	Chapter 2: Minerals	Topographic Maps
<i>Jan. 29</i>	Chapter 3: Rock Cycle, Igneous Rocks, and Volcanic Hazards	Minerals, Igneous Rocks
<i>Feb. 5</i>	Chapter 4: Sedimentary Rocks	Sedimentary Rocks
<i>Feb. 12</i>	Exam I	Metamorphic Rocks
<i>Feb. 19</i>	Chapter 6: Rock Properties	Soils, Weathering
<i>Feb. 26</i>	Chapter 7: Soils	Structural Geology
<i>Mar. 5</i>	Chapter 8: Weathering	Geophysics I: Seismic Techniques
<i>Mar. 12</i>	Exam II	Geophysics II: Electrical Methods
<i>Mar. 19</i>	Spring Break	Spring Break
<i>Mar. 26</i>	Chapter 9: Geologic Time	Floods, Slope Stability
<i>Apr. 2</i>	Chapter 18: Geophysics, Earthquakes	Groundwater
<i>Apr. 9</i>	Chapter 15: Moisture	Project
<i>Apr. 16</i>	Chapter 11: Rivers	Project
<i>Apr. 23</i>	Chapter 15: Groundwater	Project
<i>Apr. 30</i>	Chapter 17: Arid Processes	No Lab
<i>May 2</i>	Last Class	
<i>May 7</i>	Final Exam (10 - 12:45 pm)	

* Actual class schedule may vary slightly from this announced schedule.

Class Policies: I follow [University policies](#) as outlined on pp. 56-60 of the 2000 - 2002 Undergraduate Catalog. This includes the scholastic dishonesty policy.

Attendance Policy: Class members are expected to attend all classes and laboratories. Absences for University-recognized activities (e.g. sports, professional conferences, etc.), and religious holidays will be excused provided that you inform me at least a week ahead of time. See pp. 56 of the 2000 - 2002 Undergraduate Catalog for further details.

Missed Exam Policy: If you are sick on the day of the exam, you must call me *before* exam time. If you must be out of town on exam day, you must arrange to take the exam early.

NO EXTRA CREDIT work will be given in this class.

Drop Date: March 12 - Last day to drop a class with an automatic W (Note: I can not drop you from the class after this date.