

CVEN 3698 ENGINEERING GEOLOGY – SPRING 2009

Instructor: Bernard Amadei, Professor (ECOT 546), Tel: 303-492-7734
E-mail: amadei@colorado.edu

Textbooks: (1) *Engineering Geology: Rock in Engineering Construction*, R.E. Goodman, Wiley, 1993.
(2) *Laboratory Manual in Physical Geology*, Richard M. Bush (editor), American Geological Institute, (8th edition), NJ: Prentice Hall, 2009.

Topics	Readings		
	Book (1)	Manual (2)	Notes
<u>Topics to be Covered During Lectures (MWF):</u>			
Engineering geology as an interdisciplinary field	Chapter 1		x
Planet Earth and its population	Chapter 2	Labs. 1&2	x
Geologic hazards		Labs. 5&16	x
Minerals and their engineering properties		Lab. 3	x
<i>Igneous Rocks:</i> geologic classification		Lab. 5	
Engineering properties of plutonic rocks	Chapter 6		
Engineering properties of volcanic rocks	Chapter 7		
<i>Sedimentary Rocks:</i> geologic classification		Lab. 6	
Engineering properties of shales, sandstones, etc.	Chapter 4		
Engineering properties of soluble rocks	Chapter 5		
<i>Metamorphic Rocks:</i> geologic classification		Lab. 7	
Engineering properties of metamorphic rocks	Chapter 8		
Fundamentals of structural geology	Chapter 9	Lab. 10	
Distribution of rocks at and below the surface		Labs. 8 & 10	
Processes, soils and soil properties		Labs. 11-15	x
Exploration of an engineering site	Chapter 3		x
Computational engineering geology			x
<u>Topics to be Covered During Lab Periods (F):</u>			
Topographic maps and aerial photographs		Lab. 9	x
Attitude of planes: strike, dip, dip direction		Lab.10	x
Attitude of planes: field measurements			x
Geologic maps for engineers			x
Sedimentary structures			x
Geophysical methods			x
Stereographic projection			x

Lectures: MWF 10:00 - 10:50 a.m., Room ECCR 150
Lab: F 3-4:50 p.m., Room ECCR 105
Office Hours: Monday, Wednesday, and Friday: 8:00 - 10:00 a.m. or by appointment (email)
Grading: 30% Mid-Term Exam, 30% Final Exam, 10% case studies, 30% homework assignments and quizzes.
Final Exam: Wednesday May 6, 2009 from 7:30 – 10:00 p.m.
Graders: Kathleen.Fuller@colorado.edu and Kristopher.Chenosis@colorado.edu
Course Web Page: <http://ceae.colorado.edu/~amadei/CVEN3698/>
Note: Classes start and finish on time. Attendance to classes and laboratories is mandatory. Late assignments are *not* accepted (no exceptions).

Important Policies on Campus

Disability and Medical Conditions

- 1) If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and <http://www.Colorado.EDU/disabilityservices>.
- 2) If you have a temporary medical condition or injury, see guidelines at <http://www.colorado.edu/disabilityservices/go.cgi?select=temporary.html>
- 3) Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at <http://www.colorado.edu/disabilityservices>

Religious Observances

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. See full details at http://www.colorado.edu/policies/fac_relig.html.

Classroom Behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

Discrimination and Harassment

The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships apply to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based upon race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>

Honor Code

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>