Fall 9-1-2000

GEOL 301.01: Environmental Geology

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Geology 301 - Environmental Geology
Fall 2000 Schedule
Professor: J. N. Moore (SC363) (gl_jnm@selway.umt.edu)
Textbook: Edward A. Keller, 2000, *Environmental Geology, 8th Ed.,* Prentice Hall, Inc. Upper Saddle River, N.J. ISBN 0-13-022466-9

WEEK	DESCRIPTION AND READINGS
9/05	No lecture due to holiday and no laboratory (no class this week; read Chapters 1 and 2 in Keller and skim the chapters listed below to get an idea of course content).
9/11	Introduction and fundamental concepts (Chapters 1 & 2). Lab: Introduction to spreadsheet analyses; population growth past and future.
9/18	Natural Hazards: Human interaction with natural processes (Chapter 4). Lab: Surveying using the laser total station.
9/25	Rivers and flooding (Chapter 5). Lab: Measuring discharge (No lab during the week; Saturday, 9/30, fieldwork required).
10/02	Rivers and flooding (Chapter 5). **QUIZ 1 handed out/posted.** Lab: Predicting floods using data collected in field.
10/09	**QUIZ 1 due Monday, 10/9, at 10:10.** Water Supply and Use (Chapter 10). Lab: Prediction of water use and resources; reservoir effects.
10/16	Water pollution and treatment (Chapter 11). (LAST DAY TO DROP, 10/16) Lab: Predicting surface water transport of contaminants.
10/23	Water pollution and treatment (Chapter 11). Lab: Predicting groundwater water transport of contaminants.
10/30	Waste management (Chapter 12). Lab: Trip to BFI and waste water treatment plant.
11/06	Resource extraction and health (Chapters 13 & 14 and reading). Lab: Contamination effects on human heath and ecosystems.
11/13	**QUIZ 2 handed out/posted; due 11/20 at 10:10.** National GSA Meeting, NO CLASSES (vans to Reno for those who want to attend).
11/20	Energy and environment (Chapter 15). Lab: Energy use and prediction of resources in the future.
11/27	Earth system science and global climate change (Chapter 16). Lab: Past and measures of climate change.
12/04	Landslides and mass movement (Chapter 6 and Sect. 3.6). Lab: Fieldtrip if weather permits/map analysis of landslide potential.
12/11	Land use and GIS evaluation (Chapter 18). **Final exam handed out/posted.** Lab: demonstration of GIS in environmental geology and land use planning.
12/18	FINALS WEEK -**Final exam due Thursday, Dec. 21 at 17:00**.

There will be two exams and a final exam. All will be "take home" and done on you own time. The due date for each is in the schedule above. Each exam will be 1/4 of your grade (75% total). Lab exercises will be 1/4 of your grade (25%) and are due at the beginning of the week following the lab meeting they were assigned. All exams and lab must be prepared as professional documents using computer generated graphics and text. Hand written material will not be accepted.