

**E&PS 481/581 Geomorphology, Fall 2009
TENTATIVE SCHEDULE**

WEEK OF TUES. (Lab day)	TOPIC	LAB and RESEARCH PROBLEMS	READING
25-Aug	INTRODUCTION and BASIC CONCEPTS	San Ysidro field lab 1 Regional geomorphic overview	Ch. 1
1-Sep	INTRODUCTION cont., TECTONIC and CLIMATIC DRIVING MECHANISMS	San Ysidro field lab 2 Geomorphic surfaces and surficial deposits	Ch. 2
8-Sep	CHEMICAL and PHYSICAL WEATHERING	Sandia Mtn. front geomorphic system: Slopes, debris flows, alluvial fans, pediments, and soils	Ch. 3 p. 43-58 Ch. 4 p. 80-92
15-Sep	WEATHERING cont.; SOILS	Sandia Mountains "Great Unconformity" Field lab: Weathering of granitic rocks and corestone development	Ch. 3 p. 58-78
22-Sep	SOILS and GEOMORPHOLOGY	Tijeras Canyon alluvial system field lab: Fan and mainstem alluvial deposits, and surficial deposit mapping	Ch. 4 p. 92-102 (prep for slopes)
29-Sep	SOILS and MASS MOVEMENTS	Tijeras Canyon field lab 2: Surficial deposits and soil descriptions	Ch. 5 p. 134-140
6-Oct	MASS MOVEMENTS and SLOPES	Tijeras Canyon-Sandia front field lab 3: Hillslope deposits and soils	Ch. 4 p. 102-133
13-Oct	SLOPES no class Thurs-Fall Break Oct. 15-16	Jemez-Guadalupe Rivers field lab: Testing the concept of bankfull flow as the channel-forming discharge	STUDY!
20-Oct	MIDTERM EXAM: TUES. Oct. 20 HYDROLOGY and DRAINAGE BASINS	Jemez-Guadalupe Rivers computer lab: Data plotting and analysis using Excel	Ch. 5 p. 141-189 (NOT on EXAM 1)
27-Oct	FLUVIAL PROCESSES	Rio Grande field lab: Downstream effects of Cochiti Dam and channel and bed sediment changes	Ch. 6 p. 189-231
3-Nov	FLUVIAL LANDFORMS	Rio Puerco field lab: Channel morphology and sediment transport in a large arroyo system	Ch. 7 p. 232-247
10-Nov	ALLUVIAL FANS and PEDIMENTS	To be arranged	Ch. 7 p. 248-263
17-Nov	GLACIAL ICE and FLOW MECHANICS	Pleistocene Lake Estancia field trip	Ch. 9
24-Nov	GLACIAL EROSION, DEPOSITION and LANDFORMS	Differences in last-glacial equilibrium line altitudes across New Mexico, 1	Ch. 10
1-Dec	EOLIAN PROCESSES and LANDFORMS	Differences in last-glacial equilibrium line altitudes across New Mexico, 2	Ch. 8
8-Dec	COASTAL PROCESSES and LANDFORMS	Presentation and discussion of equilibrium line altitude results	Ch. 13
15-Dec	FINAL EXAM:	TUESDAY DEC. 15, 12:30 - 2:30 pm	