

SYLLABUS

Geology 819 – Seminar in Tectonophysics – Spring 2012

Instructor: Prof. Scott White, Rm. 314 EWSC, (803) 777-6304
swhite@geol.sc.edu *Office hours:* Tues. 10:15-11:15 or by appointment

Recommended texts:

Chronic, H. (1987) *Roadside Geology of New Mexico*: Mountain Press Publishing Company, Inc., Missoula, Montana

Grading

Grades will be determined by participation on the field trip (50%) and presentation/discussion of literature during class meetings (50%).

Required Materials

Field Notebook: Recommended notebook is 5"x7" hardbound. Pencils. Erasers. See note below regarding logistics and fieldwork.

Class Meetings

Are in the field (see below) from Mar 3 – Mar 10. The class is physically rigorous, so if you are not able to run up and down hills while singing, get in shape before we go. We will also have several meetings prior to the trip to read classic literature on the topic of the Rio Grande Rift, continental volcanic fields, and failed rifts. Meeting Times are TBA.

COURSE OBJECTIVES AND LEARNING OUTCOMES: This course introduces students to the process of continental rifting and associated processes including volcanism and faulting, along with the theory of aulacogen formation. At the end of this class, students will have improved their field geology skills, ability to present and communicate scientific information, and become familiar with the geological complexities associated with continental rifting.

Field Trips

"Fieldwork can be one of the most rewarding aspects of geology, but it is not always comfortable" - Dr. D. Barbeau. "Be Prepared" – Boy Scout Motto. Patience, flexibility, respect for others, and a good sense of humor will help all of us through any unexpected difficulties that might arise. Sturdy and comfortable shoes are essential. Carry a raincoat, a sweater, a winter hat, water and snacks in a comfortable backpack. A more comprehensive list of helpful camping gear will be provided. The Department of Earth & Ocean Sciences has the vast majority of camping and cooking supplies required for the trip, although you will need to arrange for your own outdoor clothing, sleeping pad and sleeping bag. Many of these items can be rented for a nominal fee from the University at the Strom Thurmond Wellness Center.