Faculty: Dave Barbeau (dbarbeau@geol.sc.edu, 803.777.5162, EWS 406), James Kellogg (kellogg@sc.edu, 803.777.4501, 803.422.1696, EWS 203), Andrew Leier (aleier@geol.sc.edu, 803.777.9941, EWS 212) + UGA faculty + 1 external petroleum geologist. At least two, and usually three faculty will be on campus at The Abbey and in the field at any given time.

Staff: Sufficient number of TAs so that we have a student:faculty ratio no greater than 7, all of whom will participate for the duration. TAs to be determined, and are usually alums of Field Camp.

Course Dates: This is a six-week, six-credit course that is taught off-campus beginning in mid-May and ending in latest June. Our tentative date of departure from Columbia is May 12th with a (tentative) return to Columbia on July 1st.

Course Format: Students measure, describe and correlate classic Paleozoic and Mesozoic stratigraphic sections in the Cañon City area of central Colorado. These observations are used to construct geologic maps, cross sections and stratigraphic columns. Projects increase in complexity as the course progresses. The geology is mapped primarily on aerial photographs with the aid of Brunton compasses and handheld GPS receivers. In the evenings or during scheduled office time, students prepare their geologic maps and cross sections on digital topographic and/or air-photo base maps facilitated by GIS software.

In addition, there are two major field trips. The first is a trip with sedimentological, structural and petroleum geology emphasis to the Colorado Plateau in eastern Utah. The second trip, which is to the Jemez Mountains, New Mexico and the San Juan Mountains, Colorado, emphasizes the Cenozoic history of volcanism and hydrothermal activity in these locations, as well as the environmental impact of mineralization on local surface water quality. There are also several shorter trips to nearby mining districts and The Great Sand Dunes and Capulin National Monuments.

This field program is in cooperation with the Department of Geology at the University of Georgia. Students and faculty from both schools work together throughout the course.

Learning Outcomes: Students completing this course will learn to:
- Recognize the common rock formations of the central Rocky Mountains
- Locate themselves and geologic features on topographic maps and aerial photographs
- Operate a hand-held GPS receiver
- Collect and record geologic observations in a field context
- Compile data collected in the field into geologic maps, cross sections and reports
- Create computer-generated geologic maps using geographic information system (GIS) software
- Interpret geologic maps and stratigraphic relationships by constructing geologic cross sections
**Prerequisites:** GEOL 202, 325 and GEOL 355 are required.

**Textbooks & Resources:** There is no required textbook for this course. The textbook *Geology in the Field*, by Robert R. Compton is recommended and several copies will be available at field camp. Students may also be interested in purchasing the *Geoscience Handbook: The AGI Data Sheets*, 4th Edition (Spiral-bound), edited by J. Douglas Walker and Harvey A. Cohen. A list of required and recommended field supplies will be provided to students planning to take this course, and include personal camping gear, and some personal field geology gear.

**Other:** Students must maintain valid and active personal health insurance for the duration of the course, and abide by behavioral policies.

**Accommodations:** The Abbey School, Cañon City, CO. Students share double occupancy rooms, and each will have her/his own desk. Breakfast & Dinner are served during the week at the Abbey. Lunches are individually prepared by students in the morning for consumption in the field. Students are responsible for food on the weekends when at The Abbey.

**Grading:** Field camp consists of four map projects, two field trip projects, and two short courses. Course grades are based on each student’s average grades for all exercises.