Edge of the Rockies

The new OU Bartell Field Camp is located on the northeastern edge of the Wet Mountains and overlooks the Cañon City Embayment, a structural reentrant in the Colorado Front Range. Snow-covered Pikes Peak is visible to the north and the Great Plains to the east. The area is an ideal geological field laboratory – the Phanerozoic section and faults associated with the mountain front are beautifully exposed and available for study. Combined with the near-perfect weather and closeness to a variety of outdoor activities and metropolitan Denver, it’s no wonder OU students have been coming here since 1950!

Course Curriculum

**GEOPHYSICS 4133** is a three-week, three-credit hour course that begins on May 25, 2015. This is the capstone course in geophysics and provides a synthesis of geophysical and geological concepts learned during the degree program. Research methods in geophysics are applied to study diverse topics including environmental contamination, tectonics, and geological structure. Research methods include literature review and synthesis, field data collection, data analysis, and a final interpretation and presentation of results.

Following a brief introduction to the regional stratigraphy and structure of the Cañon City area and the field techniques they will be using, the students embark on a number of field exercises varying from detailed to reconnaissance and stratigraphic to structural. Classic (Brunton, pace, Jacob’s staff) and modern (GPS) field techniques are employed to map on topographic maps and aerial photographs and images. Thoughtful and thorough descriptions of the rock units and their contacts are key and are emphasized. The curriculum includes one major section-measuring exercise and constructing three geologic maps of increasing complexity, plus a number of one-day exercises. A unique aspect of the OU camp is its field geophysics component in which students collect and interpret geophysical data. All the projects take place within a half-hour of camp. Field trips to examine aspects of Colorado geology not immediately available near Cañon City include the Leadville and Cripple Creek mining districts, the Pikes Peak batholith, Florissant National Monument and the Thirtynine Mile Volcanic Field, and the Laramide stratigraphy of the Raton and Denver Basins.

**GEOPHYSICS 4136**, Field Geology, is a six-week, six-credit undergraduate course that begins May 18, 2015. The course has four principal goals:

1. To give students the ability to observe and record field data – to “read the rock record” – and to interpret those data while at the same time keeping their observations and interpretations separate.
2. To give students an appreciation for geologic field work in all its forms – mapping, section measuring, collecting geophysical data, etc. – and the limitations of field work and field data.
3. To foster in students a sense of teamwork, which most of them will deal with throughout their professional careers.
4. And finally, to give students the opportunity to practice the geological techniques and see the geological concepts they have been learning about since becoming majors.

Courses are physically demanding, and students should be in good health and capable of strenuous hiking in rugged terrain while carrying a daypack and field gear. Accommodations on the basis of disability are available by contacting (405) 325-3253, 100 E Boyd St, Ste. 710, Norman OK 73019-1009 as soon as possible. The University of Oklahoma is an equal opportunity institution.