

SMU-IN-TAOS Fort Burgwin Campus

August term 2013

Biology 1305 Our Natural Environment

The Environment:

The Fort Burgwin campus is an interdisciplinary teaching and research facility located at an elevation of 7,400 feet in a mountain valley of the Sangre de Cristo Range in north-central New Mexico. The campus occupies more than 400 acres in the midst of the Carson National Forest. Alpine to desert environments are within easy driving distances and adjacent watersheds include a wide range of Rocky Mountain flora and fauna. Field trips to unique ecological biomes allow first hand examination. The prehistory and history of the region are vividly represented by the presence of Pueblo ruins, Spanish colonial and Frontier Western architecture. The city of Taos illustrates Spanish settlement from the 16 century and is well known as a center for the visual arts.

THE FACILITIES:

The campus encompasses a reconstructed frontier cavalry fort which houses classrooms, a modern library and computer lab and research labs. Students live in small dormitories, casitas of adobe construction. Each casita is electrically heated and provides complete lavatory and shower facilities as well as a living room-study area with fireplace. Meals are served in a spacious dining-assembly hall.

THE COURSE:

The course will provide an introduction to the environments of the southwest. The various plant communities present from Alpine, Canadian, Transition, upper and lower Sonoran zones will be examined. The climax vegetation will be identified and the unique adaptations shown by that vegetation recognized. The student will spend approximately four hours each day in lectures and field trips with additional day long field trips by vehicle and on foot to the varied habitats in the Taos region. The course satisfies three hours of the science requirement for non-science majors. It has been approved by the General Education council.

LEARNING OBJECTIVE OUTCOMES:

Using native plants from each of the ecological zones in the region the student will learn to identify the major climax vegetations and recognize the unique adaptations that each group has evolved for survival in the difference ecological zones. Students will learn how to collect and preserve specimens of plants for professional study and carry out an experiment on invasive plant species. Students will learn the basic features of evolution and be able to apply those features to specific ecosystems in the southwest.

TEXTBOOK: A laboratory manual, "Plants of Northern New Mexico" is available at Ft. Burgwin upon arrival, \$30.00. Please bring \$30.00 to our first meeting. Additional textbook resources are available in the library on campus.

DISABILILTY ACCOMMODATIONS.

Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS) to verify the disability and to establish eligibility for accommodations. Students may call 214 768 1470 or visit <http://www.smu.edu/dass.asp> to begin the process. Once registered students should then schedule an appointment with the professor to make appropriate arrangements.

RELIGIOUS OBSERVANCE: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence (See University Policy No. 1.9)