SMU-IN-TAOS  Fort Burgwin Campus
August term

Biology 1305 Our Natural Environment

The Instructor: Dr. John Ubelaker, Professor of Biological Sciences. Ubelaker@smu.edu cell 214726 5014; SMU campus office 234, 214 768 2728

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 over 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. This is a remarkable setting for studying environments of the southwest. 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 cantonment 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, a study of the animals and plant evolutionary relationships, adaptations and field identification. The student will spend approximately six hours each day in lectures and field trips with additional day long field trips by vehicle and on foot to the varied environments in the Taos region. The course satisfies three hours of the science
requirement for non-science majors and has been approved by the General Education Council.

LEARNING OBJECTIVE OUTCOMES:
Using environments of the region the student will learn to identify the major groups of plants and animals and recognize the unique adaptations that each group has evolved for survival in the ecological zones. Students will learn the underlying facts of evolution as they apply to the plant kingdom. Students will learn the basic features of the scientific method, design and carry out an experiment on invasive plant species that allow modifications of these zones by a changing environment caused by global warming.

TEXTBOOK: A laboratory manual is available at Ft. Burgwin upon arrival, $30.00. Please bring $30.00 to our first meeting.

DISABILITY 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)
Syllabus for Biology 1305

August
6 Arrival after 4:00 and check in at the dining hall. Dinner from 5-6:30; orientation after dinner. Plant Biology students will meet briefly after the orientation to receive laboratory notebooks.
7 Lecture at 8:30-11 at the tables outside the cafeteria. Laboratory from 1-4
8-9 Lecture and lab in classroom at fort. evolution from Aristotle and Plato to understanding Geology.
10-11 Free days
12 Lecture and lab as above; Evolution from the geologists to Darwin.
13 Lecture and lab as above.
14 Lecture and lab as above;
15 Field trip to Ojo Caliente; leave at 8:00 from the cafeteria,
16 Lecture on Alpine, Canadian zone
17-18 Free days
19 Lecture and laboratory on Transation and desert zones
20 Field trip to Gorge leave at 8:30 from Cafeteria.
21 Review for final exam
22 Final exam
23 Departure by 10:00 a.m.
SMU-IN-TAOS  Fort Burgwin 2018

May Term

BIOLOGY 1305  OUR NATURAL ENVIRONMENT

THE COURSE

The instructor, Dr. John Ubelaker, Professor of Biological Sciences and Altschuler Distinguished Lecturer will examine the major environments in the vicinity of Taos. We will examine aquatic and terrestrial environments and the laboratories will consist of collections and examining the major plant and animal associations in these diverse environments. We will spend approximately four hours each day in lectures and field trips with additional all day field trips. The course satisfies three hours of the science requirement for non-science majors.

THE ENVIRONMENT

Fort Burgwin is an interdisciplinary research and teaching 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 some 300 acres in the middle of 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. 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 16th century and is well known as a center for the visual arts.

Textbook. A laboratory manual will be made available at Ft. Burgwin at the beginning of the course. Please bring $30.00 to our first meeting on the evening of May 16 at Ft. Burgwin.