Biology 3354 Parasitology

Analysis of protozoan and helminth parasites that are important parasites of humans throughout the world. Students will use specimens and microscopic slides of eggs/larvae to make identifications using standard microscopic procedures. This course is required to be taken with one of the two courses listed below dealing with parasitic relationships.

Students can enroll in Biology 5359 and Biology 5358 and only with the prerequisite of Biology 3354

Biology 5359 Host Parasite Relationships

Analysis of host-parasite interactions from an evolutionary and ecological point of view. An intensive data generating course that provides skills in the collection of hosts, dissection and collection of ecto- and endo- parasitic organisms and analysis of parasites and within defined ecological habitats. The data analysis will result in a research paper written to conform to articles in the Journal of Parasitology.

Biology 5358 Ecology of Parasitism

An examination of facts such as moisture and vegetational cover on parasites from selected hosts. Collection and analysis of parasites from terrestrial and underground hosts will allow comparison of the diversity and abundance of parasites in these unusual environmental settings. The data analysis will result in a research paper written to conform to articles in the Journal of Parasitology.

Students can enroll in the two botany courses only if completing General Biology

Biology 3343 Field Botany

Identification and collection of vascular plants with emphasis on a plant family selected by the student. Students will collect and identify species of plants belonging to the family and prepare a list of the species present in the State and in the northcentral region around Taos county. Two hours of work each day in the herbarium preparing specimens is required.

Biology 3347 Systematic Botany

Students will prepare a monograph on a plant family selected by the student. Each species from the northcentral region of New Mexico will be described and presented with illustrations and taxonomic keys. Uses of each species by Native Americans will also be included. Students will collect specimens of their family and add them to the herbarium collections.
Biology Major courses- June term
Biol 3354 Parasitology; Biol 5358 Ecology of Parasitism; 5359 Host-parasite relationships
Biol 3343 Field Botany; 3347 Systematic Botany

SMU-inTaos Fort Burgwin The Environment:
For 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 northcentral New Mexico. The campus occupies some 400 acres in the midst of the Carson National Forest. Alpine to deserts 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.

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 a living room-study area with fireplace. Meals are served in a spacious dining-assembly hall and a laundry building is present.

The Courses: The instructor, Dr. John Ubelaker, Professor of Biological Sciences and an Altshuler Distinguished Lecturer, will work with students on Parasitology or Botanical projects. The student will spend approximately 6 hours each day in research work with field trips on campus with additional trips by vehicle and on foot to the varied habitats of the Taos region. These advanced courses satisfy 6 hours of upper division biology courses and students in parasitology must have taken 3354 Parasitology on the main campus or take it concurrently. All students must be approved by Dr. Ubelaker prior to enrolling.

Textbook: Research materials are available in the laboratory, the herbarium and in the science library

Schedule
Arrival Fort Burgwin June 4 in afternoon
Begin class June 5
Departure July 3

Contact Dr. John Ubelaker, 214 768-2728 email ubelaker@smu.edu