

Biology 5358
Ecology of Parasitism
June term SMU in Taos, 2013

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Professor of Biological Sciences
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Mission Statement: The identification and role of various biotic and abiotic factors influencing a parasite community of field mice on the campus of SMU in Taos in the northcentral region of New Mexico. In order to enroll in this course you must have taken Biology 3354 Parasitology on the main campus.

Objective: This is a field laboratory research course. The objective of the course is to collect field mice, *Peromyscus maniculatus*, in several environments on the campus of SMU in Taos. Students will collect the rodents by live trapping each evening and examining the rodents following appropriate laboratory practice the next morning for ecto parasites, fleas, mites and internal parasites, nematodes, cestodes, trematodes and acanthocephalans.

Learning outcomes: In this course students will work both independently and with others in the laboratory and field. They will learn field and laboratory techniques of collecting and handling wild rodents and the laboratory procedures involved with the collection, preservation and identification of parasites. They will also determine which of several environments are more supportive of each parasitic organism.

Students will find the experience from this course useful in hands on research methodologies involving field collected rodents and their parasites. Students will be able to use the experience when entering careers in medicine and research careers in wildlife biology, ecology, environmental science, parasitology or other medical relative careers.

Course Calendar/Schedule

Students are expected to meet with the instructor on a daily basis. Group field trips will be taken to diverse ecological zones around the Taos area. Lectures each class day will allow discussion of the life cycles, biology and pathology of each parasite found.

Grading and Policy

Your course grade will be based on Professionalism and the attendance at the scheduled times listed Activity Schedule.

Professionalism	60 points
Rodent collections	160 points
Laboratory collection of parasites	180 points

Professionalism points + field trips + herbarium study / 400 total points

Letter grades will be assigned according to the following scale: percentages

93-100 A	83-87 B	73-77 C	0-59 Don't
90-92 A-	80-82 B-	70-72 C-	
88-89 B+	78-79 C+	60-69 D	

Study Skills: As a student you have the right to make a decision to work as little or as much as you like on this course. The following suggestions are made to guide your decision process. I recommend that you are careful to spend the necessary time to complete the project.

Professionalism:

Professionalism will be measured by the professor's subjective assessment of your approach to the class and class work, industry and meaningful dialogue during our daily meetings as well as punctual attention to the schedule. Extra credit is not available in this course.

Policy:

Students requesting reasonable accommodation on any of the course components for learning differences or bonafide religious observance must contact the professor as detailed below. Only requests accompanied by the letter of documentation from an appropriate person in authority will be considered.

Disability Accommodations: Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214 768-4557) 220 Memorial Health Center, to verify the disability and establish eligibility for accommodations while they are on the main campus.

Religious Observations: Religiously observant students wishing to be absent on holidays that require missing class should notify the professor 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.

The University Honor Code shall be strictly followed. The Honor code for SMU policies as described in the student handbook will be followed in this course. You will be required to sign and present to the professor an Honor code Statement and pledge prior to handing in the monograph. Any allegation of violation of academic integrity in this course will be reviewed in the Department and/or referred to the Honor Council.

Calendar and Assignments

The calendar and assignments are subject to change at the Professor's discretion. This course is an intense experience in which you are in class most of the day. Field trips normally leave after breakfast at 8:30, travel to the site in a van and spend the rest of the day hiking with lectures. You will need to bring a notebook to take notes. I suggest you bring a bottle of water, sunscreen, insect repellent hat and good hiking or running shoes.

I welcome you to this course and believe it will be an outstanding experience that will enhance your professional careers in the biological sciences. Have a good semester and enjoy the wonderful environment of SMU in Taos

Schedule

Date

Activity

June

- 4 Arrival, check in and orientation after dinner at 6:30.
- 5 Collection of traps and processing parasites.
- 6-7. Collection of parasites 8:30, all day
- 8 Field trip to Pedernal
- 9 Field trip to Santa Fe set out traps after dinner
- 10-14 Collection of parasites 8:30 all day
- 15 Field trip to Italionalis
- 16 Field trip to Gorge
- 17-21 Collection of parasites
- 22/23 Field trips to be determined
- 24/28 Collection of parasites
- 29/30 Field trip to be determined

July

- 1-2 Assemble mice for museum collections/clean lab
- 2 Departure

Activity for August term

July

- 28 Arrival on campus at 4:00 pm. Orientation after dinner at 6:30
- 29-31 Collection of traps, processing parasites

August

- 1-2 Collection of traps, processing parasites, traps not set Friday evening
- 3 Field trip to Pedernal
- 4. Field trip to Santa Fe
- 5-9 Collection of traps, processing parasites
- 10 Field trip to Italionalis
- 11 Field trip to Gorge
- 12-13 writing of papers, clean up laboratory