

Field Biology (BIOL 4325) – Desert Ecosystems – Course Syllabus (Maymester 2022)

I. Course: BIOL 4325 – Field Biology (CRN 34181) – Chihuahuan Desert Ecosystems, Instructor Approval. An extra field trip fee of \$180 is required.

II. Instructor Information: Dr. Vicente Mata-Silva, Bioscience/2.138, 747-5959, vmata@utep.edu . Cell phone – 915-637-3163.
TA – Oceane Da Cunha, B 225 –915 -258-2270
odacunha@miners.utep.edu

III. Objective: Students will be introduced to characteristic biotic components of the Chihuahuan Desert landscape located at Indio Mountains Research Station (IMRS/Indio Ranch) and how field biologists investigate those components. Components will include organisms making up the plant and selected animal communities. Students will produce a scientific style journal of daily activities and findings and a separate catalog containing a taxonomic list of organisms observed.

IV. Evaluation: The course grade, 100 points possible, will be determined by participant's efforts in all aspects of the field trip, including assigned projects and field station duties (20 points, 20%); an informal presentation of an assigned paper at IMRS (20 points, 20%) presented as a group work; and for keeping a properly written scientific field journal and catalog (60 points, 60%). The grading scale is 90% A; 80% B; 70% C, 60% D, below 60% F.

V. Calendar (May 2022): Class time at UTEP is 10:00 am – noon in BIOL 206.

16 May: Introduction/Logistics/Orientation and Pay **\$180 fee** at UTEP Campus Cashier; put money into **Biology Field School Desert Ecology: Cost Center #30-3054-61, Account #44451. Get payment form from Ms. Magdalene Miranda in the Biology Department office.** I do not think that they take credit cards, but you can ask.

17 May: Turn in copy of payment receipt (required) and discuss how to fill out your scientific journal and catalog. Bring two Composition books.

18 May: Meet in parking lot left side of the Police Department on Sun Bowl Drive between 8:30 and 8:45 am; leave by 9:00 am. Eat lunch in Van Horn. Orientation at IMRS.

18-23 May: Field trip projects each day at IMRS; a schedule will be provided.

23 May: Clean up IMRS, eat lunch in Van Horn and return to UTEP (arrival time, approximately 3:00 pm at UTEP Police Station parking lot).

24 May: No class – Work on finalizing journal and catalog

- 25 May: Meet at 10 am in B206. Turn in journals and catalogs.
- 26 May: No class.
- 27 May: Return field journals and catalogs on table outside of B220 (final grades).

VI. Field Research Facilities:

Indio Mountains Research Station is located about 26 miles (40 km) southwest of Van Horn, in Hudspeth County, Texas (about 3 ½ hours drive from El Paso). It is isolated and located in a rugged Chihuahuan Desert shrub landscape. Many plants have thorns and spines that can inflict painful wounds. It is highly recommended that long pants be worn when actually working on projects in the field or hiking off-road. Shorts are fine around the ranch house and on road hikes, but good shoes/boots are mandatory (no flip-flops, sandals, or going barefoot). Any family emergency in El Paso can be reported to the Biology Department (915) 747-5844 during working hours (8:00 am to 5:00 pm). My cell phone number is (915) 637-3163, but its use is for emergency calls only.

VII. Course Rules: You agree to follow these rules by signing the Release and Indemnification form and also agree to obey instructions given by the instructor or teaching assistants (TA's).

Students will not leave the headquarters area without permission from instructor or teaching assistant. No student is permitted to leave the headquarters alone. If permission is granted, identify where you are going and time lines.

Quiet time at Indio Ranch headquarters will begin at 10:00 pm. This means that no loud behavior of any kind will be tolerated after that time.

Water is the most crucial resource at IMRS and must be conserved at all times. No more than one shower per person is allowed each day (less if a water shortage arises). During showering, turn off water after getting wet, soap down, and then rinse (GI shower). Never leave any faucet running when washing hands, brushing teeth, or rinsing eating utensils, etc.

Electricity is also very important because it supplies power to the water system and lighting. Electricity in any room will be shut off when that room is not in use. No charging of any personal electrical device is allowed during nighttime hours.

All screen doors should be closed at all times for insect control, especially at night. Paper wasps and night insects are common and tend to fly inside when doors are left open.

No metal implements will be used on Teflon-coated cookware in kitchen. Never use stoves on high flame.

Only paper products will be put in the metal burn barrel located next to the ranch house.

If you spill anything on the floor of any building, please clean it up, otherwise it may stain the floor. Do not eat food in dorms or bathrooms and do not leave recyclable drinking containers in the dorm rooms.

No manufactured products or food of any kind will be flushed down the toilets. Put all toilet paper into the trashcans near the toilets, which will be emptied by the KP personnel each day.

No littering. Paper waste only will be thrown into the burn barrel near the entrance to the old ranch house. Aluminum cans will be emptied, crushed and placed into designated recycle barrel (do not remove the pop-tops off aluminum cans). Cleaned heavy plastic and metal (tin) cans will be recycled in a barrel inside assembly hall; throw no non-burnable trash into that barrel. If you see litter of any kind, pick it up and place it into the appropriate container. Also, never leave empty drink containers or dirty dishes on tables in assembly hall. If you take cups or plastic containers out of assembly hall, return when finished and wash them in kitchen sink.

Do not take mattresses outside dorm buildings.

Tents will not be placed in any study area; they need to be pitched near the dorms or ranch house.

No plant or animal material (dead or alive) will be removed from IMRS without permission from the Instructor. Never approach or harass large mammals, snakes, and do not kill any organism as they might be part of a study.

The shooting of firearms, slingshots, or fireworks is prohibited. Do not light a bonfire if windy; ask instructor before hand.

All UTEP, Texas, and Federal laws are in force at IMRS.

Vehicles are limited only to graded roads, and no unauthorized use of any vehicle by students is allowed.

Please keep noise to a minimum. Even light noise like excessive loud talking/yelling and laughter can disrupt animal behavior in the surrounding desert. One of the special things about Indio Ranch is observing or hearing wild animals in their native environment.

Any person involved in unacceptable behavior, as determined by the instructor, may be transported to Van Horn where that person(s) will arrange transportation back to El Paso.

Be respectful of other persons; accepted behaviors and beliefs vary between individuals. The instructor reserves the right to enforce additional rules. If you break anything or other problems happen with the infrastructure, please notify instructor. All field trip personnel will sign the visitor log before leaving IMRS.