

Although not required, I highly encourage the use of masks in this class.

## COURSE SYLLABUS (SPRING 2022)

### I. Course Number, and Title

BIOL 3427 – Section 25627 – [BIOL 5301] - Desert Ecology (4 credits)

Lecture Meetings: M,W: 9:00 am – 10:20 am (UGLC – 208)

Lab meeting: M; 1:30 pm – 3:30 pm (Biology Building – B-206)

### II. Instructor Information

#### **Dr. Vicente Mata-Silva**

Office: Bioscience Research Building 2.138

E-mail: [vmata@utep.edu](mailto:vmata@utep.edu)

Phone: (915) 747-5959

Office Hours: M: 10:30 – 12:00, W: 10:30 – 12:00; or by appointment

Please, be professional every time you e-mail me.

A professional email includes a greeting.

<https://www.researchgate.net/profile/Vicente-Mata-Silva>

III. After completion of this course, the student will be able to explain the physical and biological characteristics of desert ecosystems, including ecological, systematic and evolutionary aspects, and behavioral and physiological adaptations of desert organisms. Emphasis will be placed on the Chihuahuan Desert of North America.

### IV. Evaluation

There will be four and three regular exams during the semester for the lecture and the lab, respectively. Lecture online exams (four) will consist of multiple choice, true false, matching, fill-in-blanks, or short answer questions. Make-up exams will be given in lectures if a good reason for absence is given beforehand, and must be taken before within two days of the original (unless prior arrangements are made). Tentative grades for the four lecture exams are as follows: The lecture (exams, quizzes, and a written paper) will count 60% and the lab (including a field trip) section will count 40% of the total grade. Do not miss lab exams because make-ups will normally not be given. The grading scale will be 90-100% (A); 80-89% (B); 70-79% (C); 60-69% (D); below 60% (F).

### V. Classroom Rules

Although not required, I highly encourage the use of masks.

The pandemic is not over yet, and you want to be healthy to successfully pass this course; therefore, **the proper use of masks is highly encouraged while in class.**

**I expect you to behave in an adult manner and give me your full attention,** but I do encourage questions and comments regarding course material. **Cell phones and**

**any other type of electronic devices will remain off during class.** Laptops will be allowed under special circumstances. Disruptive behavior may lead to expulsion from the class or course. **Be aware that I will not be happy to see students texting while I am lecturing.** Except for water, **food and drinks are not allowed in the classroom.** **And food and drinks are not allowed in the lab at all.**

VI. Attendance Policy

Regular attendance increases your opportunity to successfully master this course. It is important that you come to class and take notes, especially since exam questions will come from your lecture notes, Power point presentations, videos, and lab handouts. I may show images with no text on them. **If you miss more than three sessions without reasonable justification, I will ask you to drop the course.**

**Most of the material for this course (power point presentations and videos) will be available on Blackboard for you to review.**

In order to pass this course successfully, it is important that you come to class, review all the provided material, in time, so you are fully prepared for the exams. It is very important that you **check your UTEP email and Blackboard everyday (Announcements section).**

VII. Instructional Methodologies

Class time will consist of Power point presentations and videos, supplementary materials, and lab sessions. Presentations and videos will be posted usually on Sundays. You will also receive reminders from me and the teaching assistant when an exam date or quiz is approaching. Study guides will be given out prior to all lecture exams and lab handouts are considered study guides for that material. Much of the plant lab will consist of a trip to the Chihuahuan Desert Gardens near the Centennial Museum. You will be required to produce a short written paper on a Chihuahuan Desert native species. Be aware that any information provided in the power point presentations, videos, handouts, study guides, or anything that I write on chalk board can appear on the exams. Lecture Exams will be taken on Blackboard.

VIII. Makeup Policy

No make-up exams will be given for reasons other than illness (doctor's note required), or when a student is on official University business (documentation is required in advance). If a student has an emergency situation the date of the exam, it is the student's responsibility to let me know immediately the same day or the next, and provide documentation.

## **IX. Tentative Lecture Calendar (Spring 2022)**

Week of:

- Jan. 17: Syllabus – Desert Environment
- Jan. 24: Desert Environment – Energy flow
- Jan. 31: Nutrient Cycles – Soil Properties
- Feb. 7: **Exam 1** / Community Structure
- Feb. 14: Plant Life History / Desert Evolution
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- Feb. 21: **Exam 2** / The Great Basin Desert
- Feb. 28: The Mojave Desert / The Sonoran Desert
- Mar. 7: The Sonoran Desert / The Chihuahuan Desert
- Mar. 14: **Spring Break**
- Mar. 21: The Chihuahuan Desert / **Exam 3**
- Mar. 28: Sky Islands
- Apr. 4: Animal Adaptations
- Apr. 11: Research in the Desert
- Apr 15-17: Field trip to Indio Mountains Research Station**
- Apr. 18: Research in the Desert/Upload Species paper
- Apr. 25: Humans in the Desert
- May 4: Final Exam**

## **X. Tentative Lab Calendar (Spring 2022)**

**TA: Arturo Rocha**

E-mail: [arocha3@miners.utep.edu](mailto:arocha3@miners.utep.edu)

Office Hours: B406: T – TR 10:00 am – 12:30 pm

Week of:

- Jan. 24: Syllabus / Ecology as a science
- Jan. 31: Sampling Techniques / Equipment
- Feb. 7: Desert Producers (Chihuahuan Desert Plants)
- Feb. 14: **Lab Exam 1**
- Feb. 21: Desert Consumers (Chihuahuan Desert Invertebrates)
- Feb. 28: Desert Consumers (Chihuahuan Desert Amphibians)
- Mar. 7: Desert Consumers (Chihuahuan Desert Reptiles – Lizards)
- Mar. 14: **Spring Break**
- Mar. 21: Review for 2<sup>nd</sup> Exam
- Mar. 28: **Lab Exam 2**
- Apr. 4: Desert Consumers (Chihuahuan Desert Reptiles – Snakes, and Turtles)
- Apr. 11: Desert Consumers (Chihuahuan Desert Reptiles - Birds)
- Apr 15-17: Field trip to Indio Mountains Research Station**
- Apr. 18: Desert Consumers (Chihuahuan Desert Mammals)
- Apr. 25: Review for final exam
- May 2: Final Lab Exam**

The TA and I usually are out of town on weekends because of our field research activities, but we will respond as soon as possible the following week.

I am the Co-Director of UTEP's Indio Mountains Research Station (IMRS).



### COVID-19 PRECAUTION STATEMENT

Although not required, I highly encourage the use of masks.

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area. For more information about the current rates, testing, and vaccinations, please visit [epstrong.org](https://www.epstrong.org).