COURSE SYLLABUS (SPRING 2021)

I. Course Number, and Title
   BIOL 3427 – Sections 26289, 28524 - Desert Ecology (4 credits)

II. Instructor Information
   Dr. Vicente Mata-Silva
   Office: Bioscience Building 2.138
   Phone: (915) 747-5959
   E-mail: vymata@utep.edu
   Office Hours: by appointment
   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 online exams during the semester for the lecture and the lab, respectively. Lecture exams (four) will consist of multiple choice, true false, matching, fill-in-blanks, or short answer questions. Tentative grades for the four lecture exams are as follows: The lecture will count 60% and the lab will count 40% of the total grade. The grading scale will be 90-100% (A); 80-89% (B); 70-79% (C); 60-69% (D); below 60% (F).

V. Attendance Policy
   All the material for this course (power point presentations and Yuja videos) will be available on Blackboard for you to watch and read on your own time.

   In order to pass this course successfully, it is important that you read the provided material, watch all videos in time, so you are fully prepared for the exams. It is very important that you check your UTEP email and Blackboard every day.

VI. Instructional Methodologies
   Class time will consist of Power point presentations and videos, supplementary materials, and online lab sessions. Presentations and videos will be posted usually on
Tuesday and Thursday. You will receive and email with a Yuja link every time a video is ready for you to watch. You will also receive reminders from me and the teaching assistant when an exam date is approaching. Be aware that any information provided in the power point presentations or videos can appear on the exams. **Videos for the lecture will be asynchronous, meaning you can watch them on your own time.** Exams will be taken on Blackboard through LockdownBrowser (instructions will be share early in the semester).

VII. 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).

VIII. Tentative Lecture Calendar (Spring 2021)
Week of:
Jan. 18: Syllabus – Desert Environment
Jan. 25: Desert Environment – Energy flow
Feb. 1: Nutrient Cycles – Soil Properties
Feb. 8: **Exam 1** / Community Structure
Feb. 15: Plant Life History / Desert Evolution
Feb. 22: **Exam 2** / The Great Basin Desert
Mar. 1: The Mojave Desert / The Sonoran Desert
Mar. 8: The Sonoran Desert / The Chihuahuan Desert
Mar. 15: **Spring Break**
Mar. 22: The Chihuahuan Desert / **Exam 3**
Mar. 29: Sky Islands
Apr. 5: Animal Adaptations
Apr. 12: Research in the Desert
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 19</td>
<td>Research in the Desert</td>
</tr>
<tr>
<td>Apr. 26</td>
<td>Humans in the Desert</td>
</tr>
<tr>
<td>May 6</td>
<td><strong>Final Exam</strong></td>
</tr>
</tbody>
</table>

**IX. Tentative Lab Calendar (Spring 2021)**

**TA: Arturo Rocha**

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

**Week of:**

- **Jan. 25:** Syllabus / Ecology as a science
- **Feb. 1:** Sampling Techniques / Equipment
- **Feb. 8:** Desert Producers (Chihuahuan Desert Plants)
- **Feb. 15:** **Lab Exam 1**
- **Feb. 22:** Desert Consumers (Chihuahuan Desert Invertebrates)
- **Mar. 1:** Desert Consumers (Chihuahuan Desert Amphibians)
- **Mar. 8:** Desert Consumers (Chihuahuan Desert Reptiles – Lizards)
- **Mar 15:** **Spring Break**
- **Mar. 22:** Review for 2\textsuperscript{nd} Exam
- **Mar. 29:** **Lab Exam 2**
- **Apr. 5:** Desert Consumers (Chihuahuan Desert Reptiles – Snakes, and Turtles)
- **Apr. 12:** Desert Consumers (Chihuahuan Desert Reptiles - Birds)
- **Apr. 19:** Desert Consumers (Chihuahuan Desert Mammals)
- **Apr. 26:** Review for final exam
- **May 4:** **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.