ORGANISMAL BIOLOGY

Course Syllabus for BIOL 1306 CRN 21880 Spring 2020

Instructor
Dr. Kelly S Ramirez
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Schedule Class Time and Room
Monday and Wednesday 10:30-11:50

Office Hours
Monday 12:00-13:00 in my office (Biology B405). If you cannot make this time, please send an email to schedule an appointment.

Course Objectives
Understand how evolution drives: (i) diversity of life on Earth (ii) ecological interactions among organisms and their environments, and (iii) physiology of organisms

Required Text:
Hillis DM (2014) *Principles of Life*. Sinauer Associates/MacMillan, Sunderland, MA. ISBN 978-1-4641-0947-8

Topical Outline
1. Evolution
2. Phylogenetics
3. Diversity
4. Plant Form and Function
5. Ecology
6. Animal Form and Function

Learning Outcomes
After completing this course, you should be able to:
1. Explain how evolution drives the diversity of life on Earth.
2. Identify major plant, animal, and microbial lineages.
3. Interpret phylogenetic trees showing relationships among lineages.
4. Describe the link between structure & function for the anatomy and physiology of plants and animals.
5. Identify earth's major biomes and ecosystems.
6. Analyze biological systems on a variety of scales, from organismal to global.
7. Master biological concepts using written and lecture materials.
8. Understand and use scientific vocabulary related to organismal biology.

Grading

Exams

All students will take four exams (20 points each, the lowest of which will be dropped, for a total of 60 points) and a final (40 points). The final exam grade cannot be dropped. Because the lowest exam will be dropped, there are no makeup exams. Exams are multiple choice and scores will be curved up. Typically, the distributions on exams are approximately: 10% A; 25% B; 25% C; 20% D; 20% F.

E-Exam

All exams will be given with the in-class e-exam program. Meaning you MUST bring in your own laptop or tablet with the Respondus Lockdown Browser installed. This means you will need a functional, fully charged laptop or tablet OR you can check out a laptop from the university library. Further instructions can be found at:
https://www.utep.edu/technologysupport/_Files/docs/BB_E-Exams.pdf

The exams can account for 100% of your grade if you wish. However, the weight of the exams will be reduced if you complete any of the following *optional assignments (participation, homework, or project)*. If you chose optional participation you can down-weight your exam scores to as low as 40% but not lower. Meaning, you can pick one, two, or none of the following three options.

Optional Assignments

Optional Participation - 30%

Polls - 20%

Using the iClicker Reef App. Points will be for participation only.

Quizzes - 10%

Using the iClicker Reef App. Quizzes will be graded.

Optional homework - 30%

These assignments will be administered through blackboard and will mostly consist of practice test questions, but could also include other assignment types. There will be 8 total homework assignments

Optional project - 30%

Together you and I would agree on a project. You can bring ideas, and I may make suggestions. Students wishing to embark upon a project must come to my office hours or schedule a meeting by email sometime before February 19. This will be more work than the optional homework.

Grading Scale

You will be assigned a letter grade for the course on the following scale: A: 90- 100; B: 80-89; C: 70-79; D: 60-69; F: Less than 60. Your grade will be based on the most favorable combination of

exams and optional assignments. For example, if you do all the homework and get full credit and your exam score is 75, you would receive a final grade of 30 + 75*0.7 = 82.5 which is a B.

Academic dishonesty

Academic Dishonesty will not be tolerated. It includes, but is not limited to, cheating, plagiarism, collusion, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. If you have any questions regarding the university policy on scholastic dishonesty please contact the Dean of Students.

Attendance

If you miss a class, it is your responsibility to obtain any class notes or pertinent information from a fellow student. Regular attendance will be necessary for success in this class.

Drop date

The UTEP Spring 2020 drop deadline is March 27 2020. The College of Science will remain aligned with the University and does not approve any drop requests after that date.

Disability statement

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

Code of Conduct

Be considerate, respectful, and collaborative. Communicate openly with respect for others, critiquing ideas rather than individuals. Avoid personal attacks directed toward other students. Be mindful of your surroundings and of your fellow participants.

Schedule of Topics

DATE	TOPIC	CHAPTER	HOMEWORK
January 22	*Introduction & Syllabus*		
January 27	Evolution –Evidence for evolution & Natural Section	18/15	
January 29	Evolution – Genetic variation	15	1. Evolution
February 3	Evolution – Microevolution (Quiz)**	17	
February 5	Evolution – Macroevolution	16	
February 10	EXAM 1		2. Evolution
February 12	Phylogenetics	16	
February 17	PRESIDENT'S DAY – No Class		
February 19	Phylogenetics	16	
February 24	Diversity – Origins of life, Bacteria, Archaea (Quiz)	18/19	3. Phylogenetics
February 26	Diversity – Microbial Eukaryotes	20/22	
March 2	EXAM 2		
March 4	Diversity – Plants	21	
March 9	Diversity – Insects	23/20	4. Diversity
March 11	Diversity – Vertebrates	19	
March 16/18	SPRING BREAK		
March 23	Ecology – Populations & Communities (Quiz)	42/44	
March 25	Ecology – Ecological Interactions	43	5. Ecology
March 30	Exam 3		
April 1	Ecology – Ecosystems and Biomes	41	
April 6	Ecology – Biogeography and Global Ecology	45	
April 8	Plants – Anatomy	24	6. Ecology
April 13	Plants – Biochemistry & Growth (Quiz)	26, 27	
April 15	Plants – Physiology	25	
April 20	Exam 4		7. Plants
April 22	Animals – Metabolism, Digestion, Nutrition	29, 30	
April 27	Animals – Circulation, Osmoregulation, Hormones	31, 32, 36, 35	
April 29	Animals – Reproduction, Neuroscience, Biomechanics	37, 38, 34, 33	
May 4	Animal behavior (Quiz)	40	8. Animals
May 6	Review		
May 15	CUMMULATIVE FINAL EXAM – 10:00-12:45		

**e-exam practice, come with laptop or tablet with the Respondus Lockdown Browser installed.