ANIMAL PHYSIOLOGY SYLLABUS
BIOLOGY 5338
Spring 2025

Instructor:
Dr. Ryan Shartau, HPR 108, Email – rshartau@uttyler.edu

Class Meeting time: Monday and Wednesday 5:00 – 6:20 pm
Office Hours: M 1-4 pm, or by appointment

This course focuses on topics in physiology from an ecological perspective and will examine homeostasis as it relates to problems animals encounter in nature. This course will develop writing and verbal communication skills.

Textbook recommended reading: Moyes, CD and Schulte, PM. *Principles of Animal Physiology, 3rd edition*. (Electronic version of the text will be provided)

Topics (approximate course schedule)

Week	Date	Topic	Textbook chapters
1	Jan 13 & 15	Course introduction; respiration	9
2	Jan 22	Jan 20 – NO CLASS; respiration	
3	Jan 27 & 29	Respiration	9
4	Feb 3 & 5	Circulation	11
5	Feb 10 & 12	Circulation	11
6	Feb 17 & 19	Osmoregulation	13
7	Feb 24 & 26	Osmoregulation	13
8	Mar 3 & 5	MIDTERM EXAM; Temperature	
9	Mar 10 & 12	Temperature	15
10	Mar 17-19	Spring break (NO CLASSES)	
11	Mar 24 & 26	Endocrine/reproduction	4, 16
12	Mar 31 & Apr 2	Muscles & locomotion	6,12
13	Apr 7 & 9	Nervous & sensory system	5, 7, 8
14	Apr 14 & 16	Presentations	
15	Apr 21 & 23	Presentation & FINAL EXAM	
	Apr 28 – 30	NO CLASS (Exams week)	

*** I reserve the right to make changes to this schedule throughout the semester but I will inform you of any changes in a timely fashion ***

Evaluation
Two exams (Midterm and Final) – 20% each (not cumulative)
Paper – 30%
Presentation 20%
Attendance & participation – 10%

Letter grades will be assigned according to the following scale:
A: >90; B: 80-89.9; C: 70-79.9; D: 60-69.9, F: <60.

Each exam will consist of some combination of multiple choice, short answer, compare and contrast, and short essay questions and will cover material from the lecture. **No make-up exams** will be given without notification prior to the exam. Chapter readings are to be used as reference material to assist with lecture material. They contain more information than you will be responsible for, so use the book with this in mind. Daily attendance is expected and only medical excuses for missing tests will be accepted.

Exams are not cumulative. The midterm exam will cover only circulation, respiration, and osmoregulation. The final exam will cover only temperature, endocrine/reproduction, muscles/locomotion, and nervous & sensory systems. These may be modified depending on the material covered.

Paper and Presentation
Students will write a 10-page double-spaced research paper on a topic of their choice related to physiology – this topic can be, and is encouraged to be, related to your thesis work; this assignment is worth 30% of your final grade. Students will give a presentation on their paper to the class at the end of the term; this is worth 20% of your final grade.

Academic Integrity: Students should be aware that **absolute** academic integrity is expected of every student in all undertakings at The University of Texas at Tyler. Failure to comply can result in strong university-imposed penalties

Biology 5338 Artificial Intelligence (AI) Policy

UT Tyler is committed to exploring and using artificial intelligence (AI) tools as appropriate for the discipline and task undertaken. We encourage discussing AI tools' ethical, societal, philosophical, and disciplinary implications. All uses of AI should be acknowledged as this aligns with our commitment to honor and integrity, as noted in UT Tyler's Honor Code. Faculty and students must not use protected information, data, or copyrighted materials when using any AI tool. Additionally, users should be aware that AI tools rely on predictive models to generate content that may appear correct but is sometimes shown to be incomplete, inaccurate, taken without attribution from other sources, and/or biased. Consequently, an AI tool should not be considered a substitute for traditional approaches to research. You are ultimately responsible for the quality and content of the information you submit. Misusing AI tools that violate the guidelines specified for this course (see below) is considered a breach of academic integrity. The student will be subject to disciplinary actions as outlined in UT Tyler's Academic Integrity Policy.

For this course, **AI is <u>not</u> permitted** at all.

a. Example 1: I expect all work students submit for this course to be their own. I have carefully designed all assignments and class activities to support your learning. Doing your own work, without human or artificial intelligence assistance, is best for your efforts in mastering course learning objectives. For this course, I expressly forbid using ChatGPT or any other artificial intelligence (AI) tools for any stages of the work process, including brainstorming. Deviations from these guidelines will be considered a violation of UT Tyler's Honor Code and academic honesty values.

b. Example 2: To best support your learning, you must complete all graded assignments by yourself to assist in your learning. This exclusion of other resources to help complete assignments includes artificial intelligence (AI). Refrain from using AI tools to generate any course context (e.g., text, video, audio, images, code, etc.) for an assignment or classroom assignment.

c. Example 3: The work submitted by students in this course will be generated by themselves. This includes all process work, drafts, brainstorming artifacts, editing, and final products. This extends to group assignments where students must create collaboratively create the project. Any instance of the following constitutes a violation of UT Tyler's Honor Code: a student has another person/entity do any portion of a graded assignment, which includes purchasing work from a company, hiring a person or company to complete an assignment or exam, using a previously submitted assignment and/or using AI tools (such as ChatGPT).