## BIOLOGY 3343.001 - Physiology Syllabus & Schedule SPRING 2023

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**Office Hours**: W. Thu. 12:30 - 1:45 or by appointment. I encourage you to take advantage of this hours and stop by to discuss course topics, review your exams, or consult.

#### REQUIRED COURSE MATERIAL

Human Physiology, Bryan Derickson, 2<sup>nd</sup> Ed, 2019, Wiley, ISBN 9781119497752.

This ISBN package includes eText Book, PowerPhys (Physiological simulation software for the lab), and online course material. So, a single package of \$69.0 will take care of your lecture and lab needs.

### **COURSE DESCRIPTION**

This course will provide basic knowledge on the principles of Human physiology at cellular and organ system level. Current topics include the major organ systems structure and their functions in maintaining homeostasis essential for cell survival.

# **SPECIFIC OBJECTIVES**

- 1. Define anatomical and physiological terminology
- 2. Describe the structure and function of the various cell and tissue types
- 3. Explain the structure and function of the major organ systems
- 4. Define homeostasis and elucidate contribution of each system to whole body homeostasis
- 5. Communicate the leaned scientific concepts through case studies in medicine

**ATTENDANCE & PARTICIPATION**. This will be an interactive class and students are expected to read the scheduled chapters before lecture sessions and participate in team-based class discussions. Your <u>attendance</u> will be recorded on Canvas for each session and your <u>participation</u> will be evidenced by your answering to class Q/A and <u>discussion</u> questions on Canvas. To read other students' posts on discussion page, you will need to enter your answer first. You can then respond to others' or even edit your own answers if you wish. I encourage working together both in class and preparing for the exams. I will post my PPs at the conclusion of each chapter and hold a review session (Q/A format) over the past lectures in the beginning of each class.

If you miss class, it is your responsibility to contact other students to get notes and other announcements made during class. Please make sure to turn-on the "Announcement" in your account Notification Preferences to receive emails regarding new course announcements on Canvas.

**Finally**, you will be challenged to distill and communicate scientific knowledge. So, please enthusiastically read assigned journal articles, extract information, and synthesize a brief summary worth 10% of your course grade. For each posted article, you must write a short 3-paragraph essay. The first 2 paragraphs should summarize the hypothesis/goals, & methods, and the 3rd paragraph should focus on data/study outcome that you found interesting. Each Essay is worth 10 points, and you will need to upload them in the Assignment threads on Canvas before its closure time.

### **Grading Policy**

The final grade will be determined as follows- <u>Any modifications</u> to this policy will be communicated to class ahead of time.

Online Quizzes	10%
In-class and Online Discussions	10%
Assigned Journal Articles	10%
Exams - In-person, Scantron.	
Midterm (3 exams) & Final	70%
Total	100 %

Letter grades will be assigned according to the following scale: A = 90-100, B = 80-89, C = 70-79, D = 60-69.

No additional work for extra credit will be given at the end of the semester.

**Grade rounding**: If your final course grade is <u>within 0.5 point</u> of the next letter grade, it will be rounded up automatically. The <u>only</u> other adjustment that will be made is if the final percentage is <u>within one point</u> of the next letter grade and, the student has missed <u>three or less lectures</u> throughout the semester.

#### **Documentation**

- University Note: Have your professor or coach email me a letter explaining the reason for the absence due to a prescheduled University excused absence.
- Doctors Note: If you are sick, please bring proof of your appointment, and have the doctor explain that you were indeed sick, and should not or could not attend class.
- Civil documentation: If there are other extenuating circumstances, please provide the obituary, police report, court documents, or other evidence explaining the absence.

**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. <u>I will notify University Administration of any cheating!</u>

Copy right- Recording of class sessions: Class sessions may be recorded by students enrolled in this course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in this course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.

I reserve the right to modify this syllabus at any time. Therefore, your attendance and attention to the announcements in canvas are crucial because it will assist you to remain current on the material and know when the syllabus may be modified.

## **Important dates**

1/9 Classes begin

1/23 Census Date – Deadline for Registrations & Schedule Changes

3/13-18 Spring Break

3/23 Last day to withdraw with "W"

4/24-29 Final Exams

General information \_ Resources for UT Tyler Students Success: Please refer to "Student Resources" and "University Policies and Information" on the course Modules/Canvas regarding policies pretained to your request including make-up final exam.

### TENTATIVE SCHEDULE

Date	LECTURE	CHAPTER	
Jan 10 - 31	Class orientation, Introduction to Physiology	1	
	Chemistry (Students read-EnzyLab 1), Cell (Students read 3.1-3.6; Lecture Tissues 3/7-3.30), Metabolism (Students Read); 2-4		
	Membranre Transport (& Lab 2)	5	
	Cell Signaling	6	
	Nervouse System-Neuronal Excitability (& Lab 2)	7	
Feb 02	Exam 1	1-7	
07 - 09	The Nervous System - CNS	8	
14 - 16	Sensory System & Autonomic NS	9,10	
21 – 23	Endocrien System	13	
March 07	Exam 2	8-10, 13	
09	The Cardiovascular System-Heart	14	
13 - 17	Spring Break		
21 - 23	The Cardiovascular System- Hemodynamics	15	
28 - 30	The Cardiovascular System - Blood	16	
April 4 – 6	Immune System	17	
April 11 <sup>th.</sup>	Eam 3	14 -17	
13	The Respiratory System	18	
18 - 20	The Uninary System	19	
	Fluid Balance	20	
FINAL EX	AM 4/24-29	18-20	
	The Digestive System & Energy Balance	21-22	
	Muscle / Motor Movement	11, 12	
	The Reproductive System	23	