Biol 3343- Physiology Lecture

Course Syllabus – Fall 2023 M/W/F 9:05 AM – 10:00 AM

INSTRUCTOR
Dr. Ryan Shartau

Office: HPR 110

Email: rshartau@uttyler.edu

Office hours: Mon 10am-12pm, Wed 10-11am, or by appointment

SUGGESTED COURSE MATERIAL

Textbooks: Human Physiology, B. Derrickson, 2nd Ed, Wiley

Principles of Animal Physiology, Moyes & Schulte, 3rd Ed, Pearson.

COURSE DESCRIPTION

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

SPECIFIC OBJECTIVES

- 1. Review the structure and function of the various cell and tissue types
- 2. Explain the structure and function of the major organ systems and regulatory mechanisms involved
- 3. Decode contribution of each system to whole body homeostasis
- 4. Interconnect scientific concepts to real world physiology case studies, including those in the biomedical field

EVALUATION

Attendance: 10%

Paper: 20%

Midterm exams: 45% Final exam: 25%

Exams will be a mix of multiple choice and short answer. Midterm exams will be conducted during class time. Midterm exams are <u>NOT</u> cumulative; the final exam <u>IS</u> cumulative. There will be three midterm exams, with the lowest exam will be dropped so that the highest two midterm exam will be worth 22.5% <u>each</u> towards of your final grade. Details of the paper will be provided in class.

Attendance will count for 10% of your grade; attendance will be taken at random during the semester. Only valid medical or emergency excuses for absences will be accepted. You are responsible for signing the sheet!

No make-up exams will be given unless arranged ahead of time with a valid excuse (e.g. athletic tournament, hospitalization, etc). I do not curve or round grades – do not ask please.

TENTATIVE CLASS SCHEDULE

| <u>Week</u> | <u>Date</u> | Lecture topics | Chapters in De | <u>errickson</u> | Chapters in Moyes |
|-------------|-------------|------------------------------|----------------|------------------|-------------------|
| 1 | Aug 21 | Introduction to physiology | | 1-6 | 1-4 |
| 2 | Aug 28 | Nervous system | | 7-10 | 5, 7, 8 |
| 3 | Sep 4 | No class Labor Day; Nervous | system | 7-10 | 5, 7, 8 |
| 4 | Sep 11 | Nervous system | | 7-10 | 5, 7, 8 |
| 5 | Sep 18 | Cardiovascular system | | 14-16 | 9 |
| 6 | Sep 25 | Cardiovascular system | | 14-16 | 9 |
| 7 | Oct 2 | Midterm 1 – Oct 6; Immune: | system | 17 | 10 |
| 8 | Oct 9 | Respiratory system | | 18 | 11 |
| 9 | Oct 16 | Urinary system | | 19 | 13 |
| 10 | Oct 23 | Midterm 2 – Oct 27; Fluid ba | lance | 20 | 13 |
| 11 | Oct 30 | Endocrine system | | 13 | 4 (8, 13, 15, 16) |
| 12 | Nov 6 | Digestive system | | 21, 22 | 14 |
| 13 | Nov 13 | Midterm 3 – Nov 17; Reprod | uctive system | 23 | 16 |
| 14 | Nov 20 | Thanksgiving break | | | |
| 15 | Nov 27 | Review | | | |

Important Dates:

Sep 4 – Labor day (no class)

Oct 30 – Final date for dropping with a W

Nov 20-24 - Thanksgiving break (no class)

Dec 4-9 – Final exam period

*** 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 ***

Midterm 1: Intro to physiology; nervous system; cardiovascular system

Midterm 2: Immune system; respiratory system; urinary system **Midterm 3:** Fluid balance, endocrine system; digestive system

Final: Cumulative but will include additional focus on the reproductive system

Students will be expected to follow the University of Texas at Tyler Honor Code.

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.

CLASS EXPECTATIONS AND ACADEMIC MISCONDUCT:

Submitting plagiarized work to meet academic requirements including the representation of another's work or ideas as one's own; the unacknowledged work for word use of another person's ideas; and/or the falsification, or dishonesty in reporting research results shall be

grounds for charges of academic misconduct. Any cheating or other types of academic misconduct will be reported to the university administration and at minimum will result in automatic failure of the course.

<u>Use of electronic devices (e.g. phones, tablets, smart watches, etc) during exams is strictly forbidden.</u>