BIOL2213-02

Human Physiology

Spring 2023

LECTURE: Tuesday & Thursday 4:30pm – 5:45pm
LOCATION: Spencer Lecture Hall 247
INSTRUCTOR: Jo Lee Erickson, OTR/L
OFFICE: Immediately prior to and following class, please do not interrupt another class, using your best judgement.

On Campus Class Schedule		Location
Tuesday:	8:00am – 9:15am	Spencer LH 247
	4:30pm – 5:45pm	Spencer LH 247
	6:00pm – 8:00pm	Spencer Lab 229
Thursday:	4:30pm – 5:45 pm	Spencer LH 247
Friday:	8:00am – 9:15am	Spencer LH 247
	9:30am – 11:30am	Spencer Lab 229

OFFICE HOURS: Available as needed via email or pre-arranged on campus meeting. Please allow time for a reply, and do not expect a reply outside of normal business hours.

EMAIL: jerickson@uarichmountain.edu

PREREQUISITES for this course are successful completion of the Human Anatomy course or instructor permission.

RESOURCES:
Lecture Text *Hole's Human Anatomy and Physiology* 16th ed; Shier, Butler, Lewis.ISBN:1264262868

Optional-** *Netter's Anatomy Coloring Book Updated Edition (Netter Basic Science)* 2nd Edition
ISBN-10: 0323545033

COURSE DESCRIPTION: Human Physiology is a continuation of the Human Anatomy course designed to meet the needs of premedical students, pre-nursing, allied health students, exercise physiology students, and other students interested in human body organization. This course includes a study of the function and structure of the remaining organ systems: endocrine, cardiovascular, lymphatic, digestive, respiratory, and urinary, and reproductive systems, including fluid and electrolyte balance; and acid-base balance.

PROGRAM OUTCOME AND RATIONALE: Students will increase their understanding of basic principles and their application in the field of biological sciences. The knowledge and critical thinking skills acquired in the general education component enable students to analyze problems, arrive at intelligent conclusions, and make reasoned choices in their professional and personal lives. This course provides a basic, yet comprehensive, knowledge of the human body for any and all medical purposes: to familiarize students with the physiology of the human body, to develop an understanding of the functions of the organ systems including pathologies (diseases) that affect these systems.

COURSE OBJECTIVES: Upon completion of this course, the student will be able to:

1. Use appropriate anatomical terminology as it relates to regions, directions, body planes, and cavities of the body.
2. Describe the importance of chemistry and biological molecules associated with general human physiology.
3. Describe the functions and structures of the endocrine system and typical pathologies/medical diagnoses associated with dysfunction of any of the part(s) of this system.
4. Describe the physiology and relevant anatomy of the cardiovascular system(s) and typical pathologies/medical diagnoses associated with dysfunction of any of the part(s) of this system.
5. Describe the anatomy and physiology of the pulmonary/respiratory system and typical pathologies/medical diagnoses associated with dysfunction of any of the part(s) of this system.
6. Describe the physiology and applicable anatomy of the lymphatic and immune system(s) and how they fulfill their associated functions.
7. Describe the physiology and relevant anatomy of the digestive system and how it fulfills its functions.
8. Describe the physiology and applicable anatomy of the urinary system and how it fulfills its functions.
9. Describe the physiology and related anatomy of the reproductive system and how it fulfills its functions.
10. Describe the integration and relationships between these bodily systems
11. Be able discuss current relevant topics concerning genetics and genomics
12. Clinically apply an understanding of human physiology to realistic scenarios, case problems, and/or pathologic illnesses altering normal physiology.

Tentative Lecture Schedule for Human Physiology

SUBJECT	**CHAPTER**
Endocrine System	13
Blood 14	
January 30th	**EXAM I**
Cardiovascular System	15
Respiratory System	19
February 20th	**EXAM II**
Lymphatic System and Immunity	16
Digestive System	17

Nutrition and Metabolism	18
March 14th	**EXAM III**
Urinary System	20
Water, Electrolyte, and Acid-Base Balance	21
April 9th	**EXAM IV**
Reproductive Systems	22
Pregnancy, Growth, and Development	23
Genetics and Genomics	24
April 30	**EXAM V**
Finals Week (May 6 - 9)	**Comprehensive Final**

Last day to withdraw from the course – May 3rd.

DISCLAIMER: The information contained in this syllabus is as accurate as possible but may be subject to change with reasonable advance notice. The schedule and content of lectures and assignments may be changed at the instructor's discretion, upon oral class notification. Changes may involve additions, deletions, substitutions, or changes in sequence or due date.

COURSE CONDUCT: Classroom presentation is lecture-demonstration type. The lecture will be over the pre-assigned chapters with PowerPoints delivered as a visual aid. This will be supplemented with various scientific models, representative specimens, supplemental handouts, and special projects. Students should take notes and are expected to study beyond the lab and classroom and manage their time to develop good study habits for this course.

UARM CREDIT HOUR CALCULATOR: For every course credit hour, you should expect to spend at least three clock hours per week of concentrated attention on course-related work, including but not limited to time attending class, as well as out-of-class time spent reading, reviewing, organizing notes, preparing for upcoming quizzes/exams, problem solving, developing and completing homework, and other activities that enhance learning. For a three-hour course, a typical student should expect to spend at least nine hours per week dedicated to the course. This includes the time spent in class.

COURSE REQUIREMENTS: Students are required to ***READ*** the material in the textbook and ***take notes*** in lectures. It is advisable to read at least 5 pages in the assigned chapter daily). If you wait until the day before the test to read the chapter, study the notes, and learn the vocabulary, you will not do well on the exams.

COURSE EVALUATION: Student performance in the course will be based on the following factors:

Lecture Exams:	5 @ 100 points each	=	500 points
Quizzes:	5-10 @ 10 points each	=	50-100 points
Comprehensive Exam	1 @ 200 points	=	200 points
TOTAL POINTS POSSIBLE		=	750 – 800 points **

GRADING SCALE:
A = 100 - 90%
B = 89 - 80%
C = 79 - 70%
D = 69 - 60%
F = 59% or lower

EXAMS: Exam dates are given in the syllabus and students are required to take all the tests offered including the comprehensive final exam. Exam questions will be taken from lecture notes, exercises, discussions, audiovisuals, handouts, textbook information, and other assignments. Many exam questions will require use of this material and critical thinking to conclude the answer. Exams may include all or any combination of the following types of questions: multiple choice, true/false, short-answers, fill-in-the blank, draw and label, matching, and short answer.

Comprehensive Final - 100 multiple choice questions taken from the semester material.

1. **Everyone must take the comprehensive final.**

* 2. If an exam is missed, potential credit may be carried over to the next exam IF GIVEN PERMISSION FROM THE INSTRUCTOR BASED ON REASONING FOR THE MISSED EXAM. THE FINAL EXAM IS EXEMPT FROM THIS CLAUSE. (Example- if exam #2 is missed with an excused absence, exam 3 will be worth 200 points)

LECTURE/LAB QUIZZES – There will be approximately 5-10 quizzes will be given throughout the semester during lecture periods. The quizzes will consist of questions related to lecture exercises performed, assigned readings, and related lecture information.

ATTENDANCE REQUIREMENTS: As a student, you are responsible for all material presented during lectures, whether present for the class or not. Assignments are to be completed in a timely fashion; therefore all make-up work must be completed within 3 calendar days of your return following an absence. Unexcused absences are not to exceed twice what the class meets in a week. Laboratory is a required part of this course and failure to attend or participate **will** result in an "F" for this course. For further information, see "Student Attendance" on page 70 of the 2017/2018 UARM Academic Catalog.

MAKE-UP POLICY: A student who misses an assignment because of an officially sanctioned college activity or those with a documented excuse for their absence, will be permitted to make up the assignment or test without penalty. Any deviation from this policy will be considered on a case-by-case basis.

ACADEMIC DISHONESTY: Instances of academic dishonesty, *i.e., "cheating,"* will be dealt with in accordance with those policies outlined in the current UARM Student Handbook. Any student suspected of cheating will be asked to complete an alternate proctored exam.

It is expected that each student shall do their own work on assignments and exams. Academic dishonesty in any form will result in a zero (0) grade for that work. The policy on academic dishonesty can be found in the UARM Handbook.
Cheating: includes, but is not limited to:

- Copying from another student's test paper.
- Using any unauthorized assistance in taking quizzes, tests, or examinations.
- Possession during a test of materials that are not authorized by the person giving the test, such as class notes or specifically designed "crib notes."
- Dependence upon the aid of sources beyond those authorized by the instruct inwriting papers, preparing reports, solving problems, or carrying out assignments.
- The acquisition, without permission, of tests or other academic material belonging to a member of the University of Arkansas Rich Mountain faculty or staff.
- Plagiarism: offering the work of another as one's own without proper acknowledgement.
- Aiding and abetting another person in committing any form of academic dishonesty.
- Making, possessing, or using any falsified college documents or records; altering any college document or record, including identification cards.
- Knowingly providing false information to college officials, including disciplinary hearing bodies.
- Falsely claiming to represent the college or a registered student organization of the college.

Academic dishonesty is an academic offense and a behavioral violation. The Vice President of Academic Affairs provides information on the academic due process in instances of academic dishonesty. The student may also face the behavioral process as well.

The use of **ChatGPT** or any other Artificial Intelligence (AI) program to generate your work in any manner is prohibited in this class and constitutes academic dishonesty. This action with be subject to the penalties of the academic dishonesty policy.

CELLPHONE USAGE POLICY: Use of personal cell phones in class is prohibited **unless it is an emergency.** Failure to abide by policy results in a *verbal warning* upon first offense, an automatic *10 point deduction* in grade with each additional offense after a verbal warning has been given. **Please make sure that your cell phone and any other electronic devices are turned off (or to silent mode) during the class session**.

ADDITIONAL INFORMATION: Food and drinks are not permitted in the lecture hall, except water, provided it is maintained in a sealed tight container.

DISABILITY POLICY: It is the policy of UARM to accommodate students with disabilities, pursuant to state and federal law. Any student with a disability who needs accommodations should contact the Vice President for Student Affairs Office, 394-7622 ext.1400.

TITLE IX AND DISCRIMINATION POLICY: UA Rich Mountain adheres to a policy that enables all individuals regardless of race, color, gender, national origin, age, religion, sexual

orientation, veteran's status, or disability, to work and study in an environment unfettered by discriminatory behavior or acts. Harassment of an individual or group will not be condoned, and any person (student, faculty, of staff member) who violates this policy will be subject to disciplinary action.

Harassment that is considered discriminatory includes actions or conduct (verbal, graphic, gestural, or written) directed against any person or group with the intent to demean or create a hostile or threatening environment. It is not the intent of this policy to infringe upon or limit educational, scholarly, or artistic expression. Any person who believes he or she has been discriminated against should contact the Title IX Coordinator to obtain assistance and information concerning the filing of a complaint.

ATTENDANCE POLICY: For attendance purposes, a student who is displaying symptoms of illness must email: contact.tracing@uarichmountain.edu to determine next steps for an excused absence related to COVID or flu. Contacting an instructor **DOES NOT** start this process or guarantee an excused absence.

ARKANSAS CLEAN AIR ACT: In compliance with the Arkansas Clean Air Act, UARM is a smoke and tobacco free facility. Students and guests are to refrain from the use of all tobacco products while on campus.

STUDENT MISCONDUCT: Students committing misconduct are subject to disciplinary sanction(s) and or restrictions. Misconduct or prohibited behavior includes, but is not limited to endangerment, harassment, disruption, sexual misconduct, dishonesty, illegal drugs and/or alcohol, fire or safety issues, gambling, property violations, computer violations or other violations as listed in detail in the UARM catalog.

UARM MISSION: University of Arkansas Rich Mountain provides transformative education to all learners.

CAMPUS SECURITY: UA Rich Mountain strives to provide a safe learning environment; therefore, students who know of any security risk are asked to contact a college official. For more information follow this link and look under the title Health and Safety: http://www.uarichmountain.edu/at-a-glance/disclosures