BIOL 2404 Human Anatomy & Physiology (4 credit hours)
Fall 2020 SRSU Syllabus and Course Information

Instructor: Ms. Anne Marie Hilscher
Class time: Tues/Thurs 8:00-9:15 am in WSB 201
Office hours: M-R 9:30-10:30 am, or by appt.
Email: ahilscher@sulross.edu (Type "BIOL 2404" in subject line & sign your emails)

Optional (NOT REQUIRED) Textbook: LaPres, Kersten & Tang Gunstream's *Anatomy & Physiology with integrated study guide*, 6th Edition (2016). ISBN: 978-0-07-809729-4. McGraw Hill. **or any comparable A&P textbook.**

Course Description: This course is a four-hour introduction to the basic structure and function of human systems, with emphasis on the musculoskeletal, nervous, cardiovascular, and respiratory systems. The anatomy and physiology of the various systems will be addressed in both lecture and laboratory. This course is designed for non-Biology majors and covers in a single semester the same general areas of anatomy and physiology covered in two semesters in BIOL 2401 and 2402, but less intensively. Prerequisite: BIOL 1313 (Zoology) with a grade of C or better, or permission of instructor.

Learning Objectives for this course:

1) The student will use anatomical terminology to locate structures or lesions by relative positions, body sections and body regions.
2) The student will recognize major tissue types and subtypes, and their functions.
3) The student will distinguish body tissues, organs, and systems as different levels of organization.
4) The student will understand the structure and function of the human integumentary, skeletal, and muscular systems, as well as the nervous, cardiovascular, respiratory, and digestive systems.
5) The student will determine quantitative physiological variables such as cardiac output.
6) The student will analyze electrolyte concentrations and relative diffusion rates to explain action potentials in excitable cells.
7) The student will correlate clinical signs with activity of sympathetic or parasympathetic divisions of the autonomic nervous system.

EXAMS & QUIZZES: Your final grade will be based on your performance on four lecture exams, lecture quizzes/assignments/case studies, and your lab score. **Lecture quizzes cannot be made up.** More quizzes may be administered in lecture, but the lowest scores will be dropped. *You will receive a separate lab syllabus in lab.*

Task	Points
Student Introduction	10
Lecture Exams (4 @ 100 pt ea)	400
Quizzes/Assignments (6 @ 20 pt ea)	120
Lab	180
TOTAL	**710**

ATTENDANCE. Missing any exam without notifying me in advance will result in a zero for that exam grade—no exceptions. You must notify me before the exam. You'll have five days (including weekends) from the test date to make up the missed exam; often the makeup exam will be different from the original exam. ****If you arrive for an exam after other students have completed and turned in their exams, you will not be allowed to take the exam.**** If you fail to appear (or appear late) for your scheduled makeup exam, you will receive a zero. Finally, if you miss a class, it is your responsibility to get notes and other important information from a classmate.

Tentative Lecture Outline

Date	Lecture Topic	Weekly Lab Topic
T Aug 25	Introduction to the Human Body	Anatomical Language, Microscope, Tissues
R Aug 27	Tissues and Membranes	
T Sep 01	Skeletal System	Bone Overview; Axial Skeleton
R Sep 03	Skeletal System	
T Sep 08	Muscular System	Appendicular Skeleton
R Sep 10	Muscular System	
T Sep 15	**EXAM #1**	Muscles
R Sep 17	Chemicals of Life	
T Sep 22	Blood	**LAB PRACTICAL**
R Sep 24	Blood	
T Sep 29	Cardiovascular System	Blood & Blood vessels
R Oct 01	Cardiovascular System	
T Oct 06	**EXAM #2**	Heart Structure & Function
R Oct 08	Nervous System - Basics	
T Oct 13	Nervous System - Brain	Brain
R Oct 15	Lymphatic System	
T Oct 20	Respiratory System	**LAB PRACTICAL**
R Oct 22	Respiratory System	
T Oct 27	Digestive System	Respiratory System
R Oct 29	Digestive System	
T Nov 03	**EXAM #3**	Digestive System
R Nov 05	Urinary System	
T Nov 10	Urinary System	Urinary System
R Nov 12	Senses	
T Nov 17	Senses	**LAB PRACTICAL**
R Nov 19	Integumentary System	
T Nov 24	Integumentary System (online)	
Nov 26-27	**NO CLASSES—THANKSGIVING HOLIDAYS**	
T Dec 01	Online Wrap-up and Review	
Dec _____	**EXAM #4 (Final Exam) @ Time:**	

This schedule is subject to change for reasons of course interest or time constraint. Exams always will be administered on the dates given.

STUDENT LEARNING OUTCOMES (SLOS)

The graduating biology student graduating with a BS in Biology should be able to:

1) The student will be able to demonstrate an understanding of basic biological concepts, including but not limited to evolution via natural selection, cell theory, and the role and function of DNA.
2) The student will be able to demonstrate the utilization of various field techniques toward addressing scientific questions in the specific discipline. These field techniques can include but are not limited to plant collection and processing, various animal collection techniques, ecological surveying and sampling, and biodiversity indexing.
3) The student will be able to use biological instrumentation to solve biological problems using standard observational strategies.
4) The student will develop writing skills by summarizing and critiquing recent relevant biological literature.

CORE OBJECTIVES ADDRESSED:

- Teamwork
- Communication
- Critical Thinking Skills
- Empirical and Quantitative Skills
- Social Responsibility
- Personal Responsibility

ADA (Americans with Disabilities Act) Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email rebecca.wren@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832.

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COVID-19. Sul Ross aims to do our part to prevent further spread of the novel coronavirus SARS-CoV-2. A mandatory campus-wide mask policy is in place, given the high level of contagion of this coronavirus and the implications of its disease COVID-19. Following guidelines from the Centers for Disease Control, face masks can be cloth and must cover your nose and mouth. Masks must be kept on during classes and within all public places in campus buildings at all times as part of this community-wide effort to prevent more spreading of COVID-19. Failure to do so will be treated as a class disruption, per the Student Handbook.