

Inver Hills Community College

BIOL 2201: Human Anatomy and Physiology I

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 3

OJT Hours/Week: *.*

Prerequisites:

This course requires either of these prerequisite categories

1. BIOL 1120 - Exploring Biology (Minimum grade: 1.67 GPA Equivalent)

Or

2. BIOL 1154 - Principles of Biology I (Minimum grade: 1.67 GPA Equivalent)

Corequisites: None

MnTC Goals: Goal 02 - Critical Thinking, Goal 03 - Natural Science

Introduces students to the anatomy and physiology of the human body with special emphasis on the relationship between structure and function and homeostatic mechanisms of the body. Systems and topics covered include anatomical terminology, histology, integumentary system, skeletal system, articulations, muscular system, nervous system, special senses, and endocrine systems. Lab component will hands-on experience with tissue specimens, as well as dissections of organs and a representative mammal. This course meets Human Anatomy and Physiology Society learning outcomes and aligns with content for common healthcare admissions exams.

B. COURSE EFFECTIVE DATES: 01/01/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Articulations: 7%
2. Endocrine system: 10%
3. Histology: 7%
4. Homeostasis, introduction to human body: 7%
5. Integumentary system: 7%
6. Membrane potentials: 10%
7. Muscular system: 15%
8. Nervous system: 15%
9. Skeletal system: 15%
10. Special senses: 7%

D. LEARNING OUTCOMES (General)

1. 1.) Demonstrate understanding of the interrelationship of chemistry, cells, tissues, organs, and systems of the human body.
- 2.) Describe the relationship between anatomical structure and physiological function.
- 3.) Demonstrate understanding of physiological processes, their integration and its relationship to homeostasis.
- 4.) Communicate biological principles using appropriate anatomical and physiological terminology.
2. 5.) Perform physiological experiments, including data collection, and communicate results and analysis.
- 6.) Demonstration of proficiency with basic standard anatomy and physiology lab practices, including competence examining histological specimens with microscopes. and proper specimen handling and dissection techniques.
- 7.) Demonstrate current standard lab safety practices and procedures.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal 02 - Critical Thinking

1. Gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.
2. Analyze the logical connections among the facts, goals, and implicit assumptions relevant to a problem or claim; generate and evaluate implications that follow from them.
3. Recognize and articulate the value assumptions which underlie and affect decisions, interpretations, analyses, and evaluations made by ourselves and others.

Goal 03 - Natural Science

1. Demonstrate understanding of scientific theories.
2. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
3. Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted