

Common Course Outline
BIOL 221
Human Anatomy and Physiology II
4 Semester Hours

The Community College of Baltimore County

Description

Human Anatomy and Physiology II

Provides further study of the structure and function of the human body; emphasizes the circulatory, respiratory, reproductive excretory, and digestive systems.

4 credits: 3 lecture hours and 3 laboratory hours per week. Credit by exam available.

Prerequisite: Completion of BIOL 220 or a college equivalent with a minimum grade of “C” and exemption from or successful completion of (ENGL 052 or ESOL 052 or LVE2 or LVE3) and MATH 082 or MATH 013 or LVM2 or LVM3).

Overall Course Objectives

1. Identify and describe the structural features of the male and female reproductive systems and explain their functional roles in reproduction and inheritance.
2. Identify and describe the components of the blood and explain their functional roles in distribution of substances, regulation, and protection.
3. Identify and describe the structural features of the heart and blood vessels and explain their functional roles in hemodynamics.
4. Identify and describe the structural features of the lymphatic system and explain their functional roles in fluid dynamics and immunity.
5. Identify and describe the structural features of the respiratory system and explain their functional roles in ventilation and external and internal respiration.
6. Identify and describe the structural features of the digestive system and explain their functional roles in digestion, absorption, and excretion.
7. Describe the catabolism and anabolism of carbohydrates, lipids, and proteins.
8. Identify and describe the structural features of the urinary system and explain their functional roles in urine formation and excretion.
9. Describe the physiology of homeostatic mechanisms that control fluid and electrolyte balance.
10. Define buffer systems and explain their roles in acid-base balance.

Major Topics

1. Reproductive Systems
2. Blood
3. Heart and Circulation
4. Lymphatic system
5. Respiratory System
6. Digestive System and Metabolism
7. Urinary system
8. Fluids/Electrolytes and Acid/Base Balance

Course Requirements

Specific assignments and procedures for evaluating student performance in the class will be described in the individual class syllabus.

Grading/exams: Grading procedures will be determined by the individual faculty member but will include interim and comprehensive final examinations in both the lecture and laboratory portions of the course.

Writing: The individual faculty member will determine specific writing assignments.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common course Outline.

Date revised: 02/21/00