



Wayne County Community College District

COURSE SYLLABUS

BIO 250 Human Anatomy & Physiology II

CREDIT HOURS: 4.00

CONTACT HOURS: 60.00 HL/ 30 HLB

COURSE DESCRIPTION:

Lecture and laboratory course that is a continuation of the systems found in the human body: circulatory, respiratory, digestion, metabolism, urinary, endocrine & reproductive systems. Body fluid, electrolytes & acid/base balance are also included. The laboratory supplements the lecture topics with the use of the torso, dissection of bovine heart models, charts and slides. (Meets six hours per week; four hours lecture and two hours laboratory)

PREQUISITIES: BIO 240

EXPECTED OUTCOMES:

Lecture Objectives: *The student must be able to demonstrate an understanding of:*

1. The composition of blood, knowledge of blood groups and the mechanisms of homeostasis.
2. The structure and the functions of the major parts of the human heart, the role and the operation of the conducting system and the cardiac cycle.
3. The major organs of the respiratory system and their respective functions and what occurs during pulmonary ventilation.
4. The structure and function of the major organs of the digestive system, and the digestion of the major food groups.
5. The body's use of proteins, lipids and carbohydrates.
6. The structure and functions of the major organs of the urinary system and the process of urine formation.
7. The major electrolytes found in the body, the fluid compartments of the body and the movement of fluids between body compartments.
8. The homeostasis of acid and base levels within the body and the mechanisms that the body uses to maintain homeostasis.
9. The major glands of the endocrine system, their secretions and the actions and effects of the secretions.
10. The structure and functions of the organs of the male and female reproductive systems.

Laboratory Objectives: The student must be able to demonstrate a recognition and understanding

1. Blood cell identification.
2. Human heart anatomy and sheep heart dissection.
3. Cat internal anatomy.
4. Models, charts of human viscera (including the digestive, respiratory and urinary systems).
5. Sheep kidney, human kidney models and charts.
6. Selected histological specimens from all the systems covered.

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E