



Wayne County Community College District

COURSE SYLLABUS

BIO 125 Biology for Non-Science Majors

CREDIT HOURS: 4.00

CONTACT HOURS: 60.00

COURSE DESCRIPTION:

A lecture and laboratory course designed for students who have had little or no prior instruction in biology. Four major topic areas will be studied; (1) ecology; (2) cells and genetics; (3) human biology; and (4) hands-on biological methods. Course highlights include using the Internet to reinforce biological concepts and engaging in exciting laboratory-based and lecture-based activities. Strategies to help students apply biology to their everyday life will also be emphasized.

Lab Fee

PREREQUISITES:

EXPECTED COMPETENCIES:

Upon successful completion of this course, the student will:

- Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
- Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
- Communicate effectively the results of scientific investigations.
- Distinguish between prokaryotic, eukaryotic, plant, and animal cells, and identify major cell structures.
- Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
- Interpret results from cell physiology experiments involving movements across membranes, enzymes, photosynthesis, and cellular respiration.
- Identify the importance of karyotypes, pedigrees, and biotechnology.
- Analyze evidence for evolution and natural selection.

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