

Inver Hills Community College

BIOL 1115: Critical Issues in Human Biology with lab

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 1

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science, Goal 09 - Ethical/Civic Resp

Intended for majors and non-majors interested in critical and ethical issues related to human biology. Ethical decision-making surrounding current biological issues will be examined. Topics such as evolution, human research subjects, biotechnology, antibiotic resistance, or other emerging science issues may be examined. Students will learn and understand the process of science, be able to distinguish science from pseudo-science, and critically analyze claims. Lab includes microscopy, scientific method, study of the cell, genetics, mitosis and meiosis, aspects of human anatomy and physiology.

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

C. OUTLINE OF MAJOR CONTENT AREAS

1. Applications to other disciplines: 5%
2. Basic Biology: 25%
3. Current issues in Biology: 50%
4. Nature of Science: 20%

D. LEARNING OUTCOMES (General)

1. Explain the complexity of scientific inquiry & the peer-reviewed research process, and how it contributes to our understanding of current issues.
2. Students will identify, examine and discuss biological issues with ethical, political, social and personal dimensions.
3. Students will use their understanding of the process of science to identify and interpret quality information relevant to biological issues
4. Students will employ quality evidence to analyze and critically question viewpoints on biological issues.
2. 5. Students will combine relevant criteria with their own ethical ideals to make well-reasoned, informed conclusions about biological issues.
6. Explain the basic structure and function of human organ systems.
7. Demonstrate understanding of the basic principles of microscopy, genetics, cell division and scientific method.
8. Apply biological information to critical issues related to health and disease.
9. Participate in active discourse and problem solving exercises to foster analytical and critical thinking skills.
10. Demonstrate current standard lab safety practices and procedures.

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

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.

Goal 09 - Ethical/Civic Resp

1. Examine, articulate, and apply their own ethical views.
2. Understand and apply core concepts (e.g. politics, rights and obligations, justice, liberty) to specific issues.
3. Analyze and reflect on the ethical dimensions of legal, social, and scientific issues.
4. Recognize the diversity of political motivations and interests of others.
5. Identify ways to exercise the rights and responsibilities of citizenship.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted