

Dakota County Technical College

BIOL 1200: Biology and Society

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 10 - People/Environment

This interdisciplinary course explores the interaction between complex human perspectives and the technical and scientific aspects of biology. Issues with a biological basis such as human health, environmental safety, biodiversity, agriculture, and natural resources naturally lead to applied ethical, social, political, and economic questions. Students will explore the technical aspects of timely biological issues, breakthroughs, and technological applications in the context of their societal implications.

Meets MnTC Goal 10

B. COURSE EFFECTIVE DATES: 01/13/2003 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Biology: Basic discussions on a variety of life science topics which will include biodiversity, environment, human health and much more
2. How does society direct biological studies
3. How does biology affect society individually and as a whole

D. LEARNING OUTCOMES (General)

1. Describe and discuss the major integrating principles of biological science
2. Identify how scientists build sociality in the particular ways they know the biological world and practice biology
3. Analyze and interpret biological data, both historic and current
4. Logically argue for or against biological issues from an environmental, economic, or social value system
5. Identify how biological theories have been applied to solving social problems and used in support of particular views
6. Differentiate between scientific theory and pseudoscience
7. Interpret episodes in biology from a historical, political, and economic framework
8. Discuss and give evidence for how the meaning of nature has changed in society
9. Identify how science policy is made in the United States and why it is not static

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

Goal 10 - People/Environment

1. Explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems.
2. Discern patterns and interrelationships of bio-physical and socio-cultural systems.
3. Describe the basic institutional arrangements (social, legal, political, economic, religious) that are evolving to deal with environmental and natural resource challenges.
4. Evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions.
5. Propose and assess alternative solutions to environmental problems.
6. Articulate and defend the actions they would take on various environmental issues.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted