A. Course Description

- Credits: 3.00
- Lecture Hours/Week: 3.00
- Lab Hours/Week: 0.00
- OJT Hours/Week: 0
- Prerequisites: None
- Corequisites: None
- MnTC Goals:
  - 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: 1/13/03 – 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 biology affect society individually and as a whole
3. How does society direct biological studies

D. Learning Outcomes

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

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