

Alexandria Technical and Community College

BIOL 1430: People and the Environment

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 course meets Minnesota Transfer Curriculum (MnTC) goal area 10. When this course is taken with BIOL1431 (Lab), it meets MnTC Goal 3 and 10. This course discusses the major environmental problems challenging life on Earth. The major purpose of the class is to heighten awareness of environmental problems and to employ critical thinking to address possible solutions to these problems. Discussions include land use practices in Douglas County, Minnesota and their impact on the environment.

B. COURSE EFFECTIVE DATES: 01/01/1999 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Compare nonrenewable energy resources, renewable energy resources, energy efficiency, and solutions for energy sustainability.
2. Discuss environmental hazards and their effects to human health.
3. Discuss food, soil, and pest management.
4. Discuss how economics, politics, and world views impact environmental issues.
5. Gain an overall knowledge of environmental causes and sustainability.
6. Gain an understanding and solutions to the problems of air pollution, climate change, global warming, acid deposition, and ozone depletion.
7. Gain an understanding of the effects of urbanization, solid waste, hazardous waste, and solutions.
8. Gain an understanding of water resources, the affects of water pollution, and solutions for sustainability.
9. Gain knowledge of evolutionary development, the importance of biodiversity, and the affects of community and population ecology to sustainability.

D. LEARNING OUTCOMES (General)

1. The learner will demonstrate the ability to communicate a clear position on an environmental issue both orally and in writing.
2. The learner will describe methods being utilized to conserve and protect non-renewable and renewable resources.
3. The learner will demonstrate a clear understanding of the major environmental issues that impact Minnesota and the world.

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