

# North Hennepin Community College

## NSCI 1110: Minnesota's Natural History

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science, Goal 10 - People/Environment, Goal 03 - Natural Science, Goal 10 - People/Environment

This course is a team-taught, field-based introduction to the flora, fauna, ecology, and geologic development of Minnesota. A series of in-class sessions will prepare students for recognition and identification of plants, animals, habitats, and geologic features and for the integration of these biotic and abiotic components of ecosystems. This course will include an examination of natural resource issues and policies in the context of Minnesota's politics and economy. Two weekend field trips are mandatory. These field trips will begin on Friday afternoon and end on Sunday afternoon or early evening. This course fulfills lab requirement for Goal Area 3. (3 hours lecture, 3 hours lab)

**B. COURSE EFFECTIVE DATES:** 04/12/2001 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Rock classification and identification, fossil identification, recognition of erosional and depositional glacial landforms, classification and identification of plants and animals, introduction to basic ecological concepts, recognition of habitats, communities, and ecosystems, an understanding of the extent and consequences of human-caused environmental change on Minnesota's flora, fauna, economy and politics.

### D. LEARNING OUTCOMES (General)

1. Students will demonstrate an understanding of Minnesota's major ecosystems, biomes, and geologic features.
2. Students will gain an understanding of the influence of Minnesota's ecology and geology on the regional economic and political systems.
3. Students will develop an awareness of the extensive environmental changes caused by humans following the arrival of non-indigenous people in Minnesota.
4. Students will learn to identify and recognize various plant and animal species present in the state.
5. Students will make observations, and develop and test hypotheses regarding plant and animal habitats and communities as well as interpretations of geologic history.
6. Students will learn and use various field techniques and tools to study ecology and geology, and demonstrate their ability to communicate their observations and interpretations both orally and in writing.

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

### Goal 03 - Natural Science

1. Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines. One of these experimental components should develop, in greater depth, students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.

### Goal 10 - People/Environment

1. Explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems.

### Goal 03 - Natural Science

1. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
2. 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 10 - People/Environment

1. Discern patterns and interrelationships of bio-physical and socio-cultural systems.
2. Evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions.
3. Propose and assess alternative solutions to environmental problems.
4. 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