

# North Hennepin Community College

## BIOL 1030: Boundary Waters Canoe Area Field Biology

### 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 is a lecture, lab, and field based course in which students will study the biological communities and ecology of the mixed coniferous/deciduous forests, lakes, and wetland ecosystems of the BWCA region. The course culminates with an eight to nine day long field trip to the area. This course is open to all students.

**B. COURSE EFFECTIVE DATES:** 04/13/2001 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. The emphasis is on the study of the flora, fauna, and ecology of Minnesota's BWCA, the history of the preservation of the BWCA, the evolution of governmental policies, and the effect of human actions on the BWCA. This is a hands-on, field-based course that culminates in a lengthy canoe trip to the region.

### D. LEARNING OUTCOMES (General)

1. Understand and articulate general ecological principles in the context of the BWCA. (MnTC G3, comps. a, b; ELO 1)
2. Demonstrate an appreciation of the remarkable complexity of natural ecosystems, and the role of humans in shaping and preserving wilderness areas. (MnTC G10, comps. a, b; ELO 1, 2)
3. Identify plants, animals, and habitats characteristic of the BWCA and adjacent areas (MnTC G3, comps. b, c; ELO 1)
4. Take an active, positive role in environmental issues on an institutional level. (MnTC G2, comp. a, b, c, d; MnTC G3, comp. c; MnTC G 10, comps. c, d, e, f; ELO 3)

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

### Goal 03 - Natural Science

1. Demonstrate understanding of scientific theories.

### 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. 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.
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 10 - People/Environment

1. Discern patterns and interrelationships of bio-physical and socio-cultural systems.
2. Describe the basic institutional arrangements (social, legal, political, economic, religious) that are evolving to deal with environmental and natural resource challenges.
3. Evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions.
4. Propose and assess alternative solutions to environmental problems.

## **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

## **G. SPECIAL INFORMATION**

1. Knowledge of Human Cultures and the Physical and Natural World - Through study in the sciences, mathematics, social sciences, humanities, histories, languages, the arts, technology and professions.
2. Intellectual and Practical Skills - Including: Inquiry and analysis; Critical and creative thinking; Written and oral communication; Quantitative literacy; Information literacy; Teamwork and problem solving.
3. Personal and Social Responsibility and Engagement - Including: Civic knowledge and involvement - campus, local and global; Intercultural knowledge and competence; Ethical reasoning and action; Foundations and skills for lifelong learning.