

Fond du Lac Tribal and Community College
COURSE OUTLINE FORM

03/19/19

Please return this form to the college vice president of academic affairs and the chairperson of the Academic Affairs and Standards Council (AASC)

1. Prepared by: _____

2. Date submitted: _____

3. Date approved: 2/4/15 Date revised 3/25/25

4. Department/discipline: Biology

5. Department(s) endorsement(s): _____
(Signatures of the person(s) providing the endorsement are required.)

6. Course Title: Ecology of Minnesota
Abbreviated course title for Transcripts (25 characters or less): _____

7. Course Designator: BIOL 8. Course Level: 1065

9. Number of Credits: Lecture 3 Lab 1

10. Control Number (on site) 48 Control Number (online) 24

11. Catalog/Course description:

Students will explore the interrelationships of the plants and animals common to the region with an emphasis on developing an appreciation of the natural cycles and organism adaptations to seasonal changes.

12. Course prerequisite(s) or co-requisite(s): Accuplacer scores/ Other courses
Prerequisite(s): None
Co-requisite:

13. **Course Materials** (Recommended course materials and resources. List all that apply, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers).

Potential textbooks include:

Minnesota's Natural Heritage 2nd edition by John R. Tester

Other course materials will be provided as needed.

14. **Course Content** (Provide an outline of major topics covered in course)

1. The Landscape
2. Climate and weather of Minnesota
3. Principles of Ecology
4. Deciduous Forest
5. Northern Coniferous Forest
6. Tallgrass Prairie
7. Wetlands
8. Lakes
9. Streams and Rivers
10. The Future

15. Learning Goals, Outcomes, and Assessment

At FDLTCC we have 4 Competencies Across the Curriculum (CAC) areas. They are as follows:

- A. Information Literacy (the ability to use print and/or non-print tools effectively for the discovery, acquisition, and evaluation of information.)
- B. Ability to Communicate (the ability to listen, read, comprehend, and/or deliver information in a variety of formats.)
- C. Problem Solving (the ability to conceptualize, apply, analyze, synthesize, and/or evaluate information to formulate and solve problems.)
- D. Culture (knowledge of Anishinaabe traditions and culture, knowledge of one's own traditions and culture, knowledge of others' traditions and cultures, culture of work, culture of academic disciplines and/or respect for global diversity.)

Upon completion of this course, the student will be able to:

Learning Outcomes	Competencies (CAC)	Cultural Standards
1. Identify the relationships that exist in Minnesota between glacial history, soil development, and vegetation type.	A, B	
2. Describe the basic relationships between energy flow, food webs, nutrient cycling productivity, and population dynamics in Minnesota biomes.	A, B, C	1
3. Identify current conditions and issues of concern in Minnesota's terrestrial and aquatic biomes.	A, B, C	6
4. Describe past and present management practices as they relate to Minnesota's biological resources.	B	2
5. Identify selected flora from various communities in Minnesota.	B, C	1
6. Identify selected fauna from various communities in Minnesota.	B, C	1

WINHEC Cultural Standards:

1. **GIKENDAASOWIN – *Knowing knowledge*:** To develop human beings who value knowledge, learning, and critical thinking and are able to effectively use the language, knowledge, and skills central to an Ojibwe-Anishinaabe way of knowing.

2. **GWAYAKWAADIZIWIN – *Living a balanced way*:** To develop balanced human beings who are reflective, informed learners who understand the interrelatedness of human society and the natural environment, recognize the importance of living in harmony with creation, and are able to apply a systems approach to understanding and deciding on a course of action.
 3. **ZOONGIDE'EWIN – *Strong hearted*:** To increase the students' capacity to live and walk with a strong heart, humble and open to new ideas and courageous enough to confront the accepted truths of history and society.
 4. **AANGWAAMIZIWIN – *Diligence and caution*:** To develop students' capacity to proceed carefully, after identifying, discussing, and reflecting on the logical and ethical dimensions of political, social, and personal life.
 5. **DEBWEWIN – *Honesty and integrity*:** To increase students' capacity to think and act with honesty and integrity as they understand and face the realities of increasingly interdependent nations and people.
 6. **ZAAGI' IDIWIN – *Loving and Caring*:** To encourage students' acceptance of the diversity within their school, community, and environment by developing healthy, caring relationships built on respect for all.
 7. **ZHAWENINDIWIN – *Compassion*:** To expand students' knowledge of the human condition and human cultures and the importance of compassion especially in relation to behavior, ideas, and values expressed in the works of human imagination and thought.
16. **Minnesota Transfer Curriculum (MnTC):** List which goal area(s) – up to two – this course fulfills.

See www.mntransfer.org

Goal Area(s): 3 & 10

Goal Area 3: Natural Sciences

Outcomes:

1. Demonstrate understanding of scientific theories.
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 Area 10: People and the Environment

Outcomes:

1. Explain the basic structure and function of various natural ecosystems and of Human adaptive strategies within these systems.
2. Discern patterns and interrelationships of bio-physical and socio-cultural systems.
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.
5. Articulate and defend the actions they would take on various environmental issues.

17. Are there any additional licensing/certification requirements involved?

 Yes X No

Provide the required documentation to show course meets required licensing/certification standards.

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