Fond du Lac Tribal and Community College
COURSE OUTLINE FORM

Updated 9/25/14

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: 07/10/10 Date revised 09/23/14

4. Department/discipline: Biology

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

6. Course Title: Environmental Science
Abbreviated course title (25 characters or less):_____

7. Course Designator: BIOL 8. Course Level: 1060 9. 2XXX

10. Number of Credits: Lecture 3 Lab 1

11. Control Number (on site) 72/24 Control Number (online)_____

12. Catalog/Course description:

This course will focus on basic concepts in biology, ecology, and the scientific method. In addition, students will develop the ability to discuss the scientific basis of environmental issues and investigate potential solutions. Local ecosystems, organisms, and environmental issues will be used to develop an environmental literacy for students in this course. (Meets MnTC goal areas 3 and 10).

13. Course prerequisite(s) or co-requisite(s): Accuplacer scores/ Other courses
Prerequisite(s):
Co-requisite:

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

Course materials including a textbook will be selected by faculty based on relevance to the study of Environmental Science and course objectives.

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

Lecture topics:
- Society and the Environment
- Ecology
- Biomes
- Process of Science/ Scientific Method
- Ecosystems
- Soils and Agriculture
- Biodiversity and Conservation Biology
- Environmental Health and Toxicology

- Environmental Conservation
- Global Change

Lab topics to closely follow lecture material

16. **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.)

Course learning outcomes will fulfill the identified competencies.

Course Learning Outcomes. After completing this class you should be able to:

1. Describe traditional and present interactions between various cultures and their environment. (D) [Goal 2]*
2. Discuss the community structure and function of selected terrestrial and aquatic ecosystems. (C)
3. Describe the following ecosystems principles: food webs, energy flow, nutrient cycling, productivity, and population dynamics, species interactions, and succession. (C)
4. Identify and describe the ecology of selected organisms (plants and animals) from local ecosystems. (B, D) [Goals 1 and 2]*
5. Discuss current or historical environmental problems and potential solutions. (A, B, C, D) [Goals 1 and 2]*
6. Formulate and test hypotheses by performing laboratory simulations or field experiments. (A, B, C)

*Bracketed Goals relate to the following *Gidizhitwaawinaanin* goals:
Goal 1: **GIKENDAASOWIN** – Knowing knowledge
Correlates with MTC Goals 1 & 2: Communication & Critical Thinking
Goal 2: **GWAYAKWAADIZIWIN** – Living a balanced way
Correlates with MTC Goals 3 & 10: Natural Sciences & People and the Environment

17. **Minnesota Transfer Curriculum (MnTC):** If this course fulfills an MnTC goal area, state the goal area and list the goals and outcomes below:

See www.mntransfer.org

Goal Area(s): 3 & 10
Goal and Outcomes:

Goal 3: Natural Sciences
Goal 10: People and the Environment