

**Fond du Lac Tribal and Community College
COURSE OUTLINE FORM**

Updated 9/23/14

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: _____ Date revised 10/14/14

4. Department/discipline: Biology

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

6. Course Title: Aspects of Biology
Abbreviated course title (25 characters or less): _____

7. Course Designator: BIOL 8. Course Level: 1010 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 covers basic biology as it pertains to contemporary issues. Biology coverage includes cell biology, genetics, evolution and ecology. In addition to helping students understand biology, students will learn to more critically evaluate science that is presented in the media. Humans are discussed as a model organism. (Meets MnTC goal area 3).

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).

Campbell, N.A., J.B. Reece, and L.G. Mitchell. 2008. Biology. Benjamin/Cummings, 8th Ed. New York, NY. 1175 pp.

Lab materials provided

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

Lecture topics:

Evolution

Diversity of Life-biological systematics

Biological Diversity

Developmental Biology

Human Anatomy and Physiology

DNA/RNA

Biochemical Pathways

Ecological Concepts

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:

Upon completion of this course, students will be able to:

- 1. Describe the characteristics of living things. (B)
- 2. Describe the role of DNA, RNA, and protein in biological systems. (B, C)
- 3. Summarize the different metabolic biochemical reactions that are used by living things. (B, C)
- 4. Discuss major taxonomic relationships between organisms. (B)
- 5. Summarize human organ systems and their role in the maintenance of homeostasis. (B, C)
- 6. Demonstrate basic laboratory techniques relevant to the study of biology. (B, C)

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

Goal and Outcomes:

Goal 3: Natural Sciences

Demonstrate understanding of scientific theories:

Students will be able to explain and present examples of the importance of the scientific method in biological studies including the review of popular scientific literature.

Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines: Students will demonstrate an understanding of the scientific research process.

Communicate their experimental findings, analyses, and interpretations both orally and in writing: Students will communicate effectively in writing, speech, and visual presentations within a variety of contexts.