

Dakota County Technical College

BIOL 1500: General Biology

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 1

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

This course surveys the basic principles of biology. Content topics include fundamental concepts of cellular structure and metabolism, inheritance, biodiversity, ecology, and evolution. The lab component includes application of concepts with an emphasis on observation, the scientific method, and analysis. This course provides a foundation for students pursuing health-related careers as well as those in non-science majors.

Meets MnTC Goal 3

B. COURSE EFFECTIVE DATES: 08/01/2002 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. integrate the basic physical, chemical and biological disciplines in the study of life
2. measure and evaluate theories, hypotheses and natural laws which are pertinent to the study of life
3. investigate the physiological activities of life
4. identify ecological problems in the biosphere
5. acquire fundamental biological techniques and skills through practical experiences in the laboratory
6. utilize written and oral communication skills
7. work effectively in groups

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

Goal 03 - Natural Science

1. Demonstrate understanding of scientific theories.
2. 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.
3. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
4. Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted