A. Course Description

Credits: 4

Prerequisites:

MATH 098 Introduction to Mathematical Thinking
OR

MATH 102 Mathematics of Sustainability or placement at or above College Algebra level on the University's assessment test.

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: Goal 03 - Natural Science

This course is an introduction to the study of living things. Topics covered include: cell biology, evolution, use of the microscope, and the diversity of life. Lab included. Intended for students preparing for BIOL 111 General Biology and students seeking a general education science course with lab. First day attendance required except by instructor permission.


C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
2. Demonstrate mastery of the biology concepts and vocabulary necessary for success in a general biology course for biology majors and for informed citizenship.
3. Demonstrate quantitative reasoning skills and competency with arithmetic and statistics at a level appropriate for graduates of bachelors degree programs.
4. Demonstrate understanding of scientific facts and theories in biology.
5. Explain and apply knowledge of cell biology, evolution, the diversity of life, and other topics in biology.
6. Formulate and test hypotheses by performing laboratory experiments in biology, including the collection of data, statistical and graphical analysis of results, and an interpretation of its sources of error and uncertainty.
7. Understand and apply knowledge of measurement and use of the microscope, and use that knowledge in the proper conduct and interpretation of laboratory investigations.

E. Learning Outcomes (MN Transfer Curriculum)

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. Demonstrate understanding of scientific theories.
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.

G. Special Information
Note: First day attendance required except by instructor permission.