SECTION HEADING

BIOL 1100: Survey of Biological Science

Description

Survey of Biological Sciences introduces major concepts of biology which include cell biology, patterns of inheritance, classification, evolution, and diversity of life. Special emphasis will be placed upon understanding of the science of biology and its significance to everyday life. Biology 1100 is intended for nonmajors. This course includes a lab.

Credits

3

Prerequisite

None

Corequisite

None

Topics to be Covered

- 1. The science of life
- 2. Chemical basis of life
- 3. Organic molecules
- 4. Cells; structure and function
- 5. Cellular reproduction
- 6. Patterns of inheritance
- 7. Diversity of life

Learning Outcomes

- 1. Define and describe biology as the science of life
- 2. Identify the organic molecules of life and describe their importance
- 3. Diagram cell structure and explain the function of the cell and its components
- 4. Describe and identify the mechanisms of cellular reproduction
- 5. Apply and compare the patterns of inheritance
- 6. Classify the diversity of life

Credit Details

Lecture: 2

Lab: 1

OJT: 0

MnTC Goal Area(s): Goal Area 03 - Natural Sciences

Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal Area 03: Natural Sciences

- 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 sciencerelated topics and policies.