

# Bemidji State University

## PHYS 2101: Physics I

### A. COURSE DESCRIPTION

Credits: 5

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

A calculus-based introductory physics sequence, with laboratory. Topics include mechanics, vibrations, waves, fluids, thermodynamics, electricity, magnetism, DC and AC circuits, optics.

Prerequisite/corequisite: MATH 2471. Liberal Education Goal Area 3 (LC)

**B. COURSE EFFECTIVE DATES:** 08/25/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

None

### D. LEARNING OUTCOMES (General)

None

### 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