

# Minnesota State University Moorhead

## PHYS 161: Physics II with Algebra & Lab

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 0

Lab Hours/Week: 4

OJT Hours/Week: \*.\*

Prerequisites:

None

Corequisites: None

MnTC Goals: None

Concepts and principles of elementary physics presented in a guided activity-based format which integrates lecture and laboratory using cooperative group learning techniques. Includes thermal physics, electromagnetism, and optics.

**B. COURSE EFFECTIVE DATES:** 05/21/2021 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. Become familiar with a variety of physics concepts including electricity and magnetism, sound, light, and waves.
2. Develop critical thinking skills.
3. Develop estimating and unit analysis skills.
4. Participate in inquiry-based experiences.
5. Become familiar with the scientific method.
6. Develop laboratory skills and technical writing skills.
7. Develop data analysis and error analysis within a laboratory experiment.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted