

# Minnesota State University Moorhead

## PHYS 492: Senior Project

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 1

Lab Hours/Week: 3

OJT Hours/Week: \*.\*

Prerequisites:

This course requires the following prerequisite  
PHYS 342 - Introduction to Research

Corequisites: None

MnTC Goals: None

A project involving experimental and/or theoretical research on a physics topic with extensive library research as well. A detailed written report and an oral presentation are required.

**B. COURSE EFFECTIVE DATES:** 02/02/2016 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. Reach both quantitative and qualitative conclusions from experimental and observational data.
2. Apply analytical thinking, instrumentation skills, and computer techniques to perform experiments.
3. Design and carry out an independent research.
4. Communicate orally and in writing in a professional manner.
5. Demonstrate the skills of a physicist: checking units, limiting cases, developing conceptual and mathematical skills.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted