# Minnesota State University Moorhead

## CHEM 210L: General Chemistry II Lab

### A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: 0

Lab Hours/Week: 3

OJT Hours/Week: *.*

Prerequisites:
CHEM 150 - General Chemistry I

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

This laboratory accompanies CHEM 210 General Chemistry II.  MnTC Goal 3.

### B. COURSE EFFECTIVE DATES:  01/12/2009 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Experiments related to stoichiometry, chemical kinetics, chemical equilibrium, the nature of matter, Reduction-oxidation chemistry.
2. Collection and interpretation of numerical and graphical data.
3. Communicating results in a written lab report.

### D. LEARNING OUTCOMES (General)

1. Collect and graphically analyze experimental data and interpret the results in light of various hypotheses regarding the system or principle being studied.
2. Determine the relative error of experimental data and discuss the possible sources of this error.
3. Report experimental procedures, analysis and results in a lab report following a provided format.

### 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