A. Course Description

Credits: 1

Lab Hours/ Weeks: 
Corequisites: None

Lecture Hours/ Week :

MnTC Goals: Goal 03 - Natural Science , Goal LS - Upper Division Liberal Studies

This course provides the laboratory experience to accompany CHEM 232 Organic Chemistry II. This course continues the introduction of the techniques, specialized equipment, instrumental methods and safety procedures that was begun in Chem 231 Organic Chem I Lab. Students get hands-on experience with the instrumentation, equipment, hazardous material procedures, and multi-step methods employed in the synthesis of larger, more complicated organic structures from simpler molecules.

B. Course Effective Dates: 12/15/2012 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Apply the concepts learned in lectures.
3. Perform laboratory techniques safely and accurately.
4. Understand and consistently apply principles of scientific ethics and academic integrity.
5. Use several procedures and instruments and record their observations in formal lab reports, using proper laboratory, data analysis, and scientific writing skills.

E. Learning Outcomes (MN Transfer Curriculum)

Goal 03 - Natural Science

1. 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.
2. Demonstrate understanding of scientific theories.
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.

Goal LS - Upper Division Liberal Studies

None

G. Special Information

Note: First day attendance required except by instructor permission. CHEM 332 and 332L must both be in the cart at the same time when you register.