A. Course Description

Credits: 3

Prerequisites: CHEM 231 Organic Chemistry I AND CHEM 332 Organic Chemistry II level change-bas

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

Medicinal chemistry allows the advanced chemistry student to explore the considerations of drug design and development as well as case studies on how different classes of therapeutic agents act in the human body. Topics include drug targets, drug sources, structure-activity relationships, pharmacokinetics, pharmacodynamics, and the modern drug discovery pipeline. This class is suggested for those students intending to continue in health sciences.

B. Course Effective Dates: 08/25/2012 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Identify drug targets within the human body.
2. Identify physical property considerations for drug development.
3. Interpret SAR, pharmacokinetic, and pharmacodynamic results from medicinal chemistry experiments.
4. Identify drug families and targets for specific therapeutic applications.
5. Write summaries on drug-target interactions and relate how the interactions lead to a state of disease.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: First day attendance required except by instructor permission.