Medicinal Chemistry: Research Techniques and Principles (16:663:501)

Syllabus - Fall 2015

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Schedule: Monday, Wednesday 8:15 – 9:35 AM, PH 323A

A. Chemical Structure - 6 Lectures
   - Bonding
   - Stereochemistry
   - Conformations

Exam #1

B. Chemical Reactivity - 12 Lectures
   - Thermodynamics, Kinetics, Isotope Effects
   - Acids and Bases
   - Substituent Effects
   - Reaction Mechanisms - Additions
   - Reaction Mechanisms – Eliminations

Exam #2
   - Reaction Mechanisms – Substitutions
   - Reaction Mechanisms – Pericyclic Reactions
   - Reaction Mechanisms - Organometallic

Exam #3

C. Research in Medicinal Chemistry – 6 Lectures
   - Literature Searching
   - Laboratory Safety
   - Record Keeping
   - Practical Aspects of Synthetic Medicinal Chemistry

Exam #4

Required Textbooks:

Recommended Additional Textbook:

Grading: Four exams (4 x 100 pts) = 400 pts + Attendance/Punctuality (10 pts) + Preparedness (20 pts) + Class Participation (20 pts) = 450 points total

It is expected that you attend all classes and be punctual.

Reading assignments (See Lecture Schedule) are to be completed before coming to class.