Medicinal Chemistry: Research Techniques and Principles (16:663:501)
Syllabus - Fall 2017

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Schedule: Tuesday, Thursday 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.