CHEM 2110 Fundamentals of Spectroscopic Analysis

Course Description:

This course teaches basic spectroscopic techniques used commonly for structure elucidation of organic compounds. It includes ultraviolet-visible spectrometry, infrared spectroscopy, mass spectrometry, ¹H and ¹³C nuclear magnetic resonance (NMR) spectroscopy, as well as brief introduction of multinuclear NMR.

Main Course Outline (for reference only):

- 1. Molecular Formulas and What Can Be Learned from Them
- 2. Infrared Spectroscopy
- 3. Ultraviolet Spectroscopy
- 4. Nuclear Magnetic Resonance Spectroscopy
- 5. Mass Spectrometry
- 6. Combined Structure Problems