Chem 363: Organic Chemistry Laboratory

Course description: Emphasizes organic synthesis and the relationship between spectra, structure and reactivity of synthesized materials.

Course Goals

Develop the ability to perform multistep synthetic experiments

Apply the ability to draw molecules, stereochemistry and reaction mechanisms

Develop the ability to use analytical and spectroscopic data to assign molecular structure

Apply the concepts of nucleophilicity and electrophilicity to chemical reactions

Apply physical and spectroscopic methods to the characterization of mixture of compounds

Develop the ability to perform purification procedures

Program Goals

Develop the ability to design, conduct and observe chemical experiments and to record and critically analyze data from chemical experiments.

Develop the ability to represent chemical information.

Develop the ability to work competently, independently and safely in a laboratory environment.

Develop competence in problem solving.

Develop the ability to use the chemical literature in a critical manner.

Develop the ability to disseminate scientific information orally and in writing.

Develop the ability to apply academic and scientific integrity to scholarly and professional endeavors.