

Course:

**CHEM 4050 Advanced Organic Chemistry**

4 hours

Departments/Programs:

Chemistry

Topics presented in this course are reaction mechanisms, modern synthetic methodology, and the application of molecular modelling computational methods to organic chemistry. The laboratory work includes syntheses illustrative of special techniques, experiments concerned with the determination of reaction mechanisms, use of molecular modelling and molecular orbital computational programs, and research simulation.

Three lectures and one 3-hour laboratory per week.

*Prerequisite(s): CHEM 3090 Organic Chemistry III: Intermediate Organic Chemistry and CHEM 3510 Physical Chemistry I, Thermodynamics and Kinetics. MATH 1610 Calculus II strongly recommended.*

(Normally offered each fall semester of even years.)