Chem 452: Reaction Mechanisms and Dynamics

Course description: Predicting the kinetic behaviour of different types of mechanisms with examples from inorganic and organic chemistry.

Course Goals

Develop an understanding of kinetics

Develop an understanding of the concepts and applications of kinetics for one-step and multistep reactions

Develop the ability to derive reaction mechanisms and determine rate-determining steps for multistep reactions from experimental kinetic data

Develop the ability to interpret activation parameters from experimental data

Develop the ability to predict and control rates by varying experimental conditions

Program Goals

Develop the ability to apply mathematics to chemistry.

Develop an understanding of the use of models, their premises, advantages and limitations.

Develop competence in problem solving.