

Chem 318: Instrumental Techniques of Analysis

Course description: Theory and applications of the most generally applied methods of instrumental analysis

Course Goals

Develop an understanding of the role and function of the components of various chemistry equipment/instrumentation

Develop an understanding of the principles behind physical measurements

Develop an understanding of the theory of spectroscopic and spectrometric techniques

Develop the ability to recognize the commonalities between analogous components of different types of instrumentation and equipment

Develop an understanding of a range of analytical or characterization methods

Develop the ability to apply the concepts of electrochemistry to analytical methods

Develop an understanding and applications of a variety of analytical and separation techniques

Develop an understanding of contemporary and relevant research

Develop the ability to implement and analyze spectroscopic and spectrometric measurements

Acquire a familiarity with the use of instrumentation and equipment in chemistry

Program Goals

Develop competence in problem solving.

Develop the ability to disseminate scientific information in writing.