CHEMISTRY (CHM)

CHM 521 Chemical Demonstrations (3 Credits)

Contact the department for specific course information.

CHM 531 Biochemistry (3 Credits)

Contact the department for specific course information. **Prerequisites:** Take CHM-321 CHM-322;

CHM 532 Biochemistry (3 Credits)

Contact the department for specific course information. **Prerequisites:** Take CHM-321. Take CHM-322.

CHM 545 Mathematical Method (3 Credits)

Study of advanced mathematical topics including Fourier series, determinants and matrices, complex variables, calculus of variations, vector analysis, series solutions of differential equations, and partial differential equations, with special emphasis on applications to physical science topics.

CHM 573 Advanced Inorganic Chemistry (3 Credits)

The applied inorganic chemistry laboratory will provide an introduction to the synthesis, isolation, and characterization of inorganic and organometallic compounds. The student will conduct basic synthetic laboratory procedures and utilize a variety of analytical characterization techniques. Each student will complete a series of structured, interconnected laboratory experiments derived from the current literature.

CHM 581 Special Topics (3 Credits)

Contact the department for specific course information.

CHM 633 Molecular Dynamics (3 Credits)

This course examines modern concepts in reaction-transport phenomena, transition state theory, and reaction dynamics. Experimental techniques and physical models for reactivity at a microscopic level are discussed.

CHM 663 Atomic/ Molecular Spectroscopy (3 Credits)

This course deals with the study of the interaction of radiation with matter. The application of quantum mechanics for the spectroscopic determination of the rotational, vibrational, and electronic structure of matter is examined.