CHEM 3000: Chemical Literature

3 Credit Hours

Prerequisite: CHEM 3361

An exploration of the process and practice of chemical research that leads to publication. An introduction to resources and methods for searching the chemical literature.

CHEM 3010: Medicinal Chemistry

3 Credit Hours

Prerequisite: (CHEM 1212 and CHEM 3362)
Concurrent: (CHEM 3501 or CHEM 3500)

This course covers fundamentals of pharmacology such as drug discovery/development and pharmacokinetics, with emphasis given to the role of chemistry and biochemistry in these areas. A main focus of the course will be how drugs function at the molecular level. Examples will be chosen from drugs that target enzymes, receptors, and DNA.
Notes: This course may be cross-leveled with CHEM 5010

CHEM 3030: Pharmaceutical Analytical Chemistry

3 Credit Hours

Prerequisite: CHEM 2800 and CHEM 3000

This course describes the major techniques used in the analysis of pharmaceuticals following the United States Pharmacopoeia. The topics include quality control, physical and chemical properties of drug molecules and various chemical analysis including classical methods, spectroscopy, and chromatography.

CHEM 3050: Physical Chemistry

3 Credit Hours

Prerequisite: PHYS 2212 (or concurrent enrollment), MATH 2202 and CHEM 2800

This one semester course in physical chemistry provides a survey of thermodynamics, chemical equilibria, and kinetics. It also includes an introduction to the quantum mechanical principles important in understanding molecular spectroscopy and molecular modeling.

CHEM 3105: Inorganic Chemistry

3 Credit Hours

Prerequisite: CHEM 3601

In-depth study of concepts and theories of inorganic chemistry. Topics include atomic structure, bonding, coordination chemistry, reaction mechanisms, symmetry, and a general survey of descriptive inorganic chemistry.