122. Advanced Inorganic Chemistry (3) (Former Chem 120)

Prerequisite: three semesters of upper division chemistry including Chem 106. General principles; structural and descriptive inorganic chemistry; correlation between observed characteristics and more fundamental properties. (2 lecture, 3 lab hours)

126. Instrumental Methods of Analysis (3)

Prerequisite: Chem 106, 129A; one year physics with laboratory. Recommended: physical chemistry. Theoretical principles of analytical chemistry; physical and instrumental methods of analysis of inorganic and organic substances. (1 lecture, 6 lab hours)

128A-B. Organic Chemistry (3-3)

Recommended for science majors and preprofessional students. Prerequisite: for 128A, Chem 1A-B or 2A-B; for 128B, Chem 128A or 8 and permission of instructor. A thorough study of the aliphatic and aromatic compounds of carbon and their reactions.

129A-B. Organic Chemistry Laboratory (2-2)

Recommended for science majors. Prerequisite or concurrently: Chem 8 or 128A. (A) General techniques used in working with aliphatic and aromatic compounds. (B) Preparation of organic compounds. (6 lab hours)

130. Qualitative Organic Analysis (3)

Prerequisite: Chem 106, 128A-B, 129A-B. Characterization of organic compounds through study of chemical and physical properties. (1 lecture, 6 lab hours)

150A. General Biochemistry (4) (Former Chem 151)

Prerequisite: Chem 8, 105, 109, and one year of general physics. Chemistry of carbohydrates, lipids, proteins, and biochemical regulators; digestion absorption, detoxication, and metabolism. (2 lecture, 6 lab hours)

150B. Clinical Biochemistry (4) (Former Chem 152)

Prerequisite: Chem 150A. Intermediary metabolism; clinical laboratory methods of analysis of tissues and body fluids and their diagnostic value. (2 lecture, 6 lab hours)

190. Independent Study (1-3; max see reference)

See *Regulations and Procedures—Independent Study*.

GRADUATE COURSES

(See *Course Numbering System—Definitions and Eligibility*)

211. Advanced Physical Chemistry (3)

Prerequisite: Chem 110A-B, 111A-B. Topics in physical chemistry selected from thermodynamics, statistical mechanics, kinetics, electrochemistry, phase rule, photochemistry, radioactivity and isotopes, states of matter.

220. Advanced Inorganic Chemistry (3)

Prerequisite: Chem 122. Selected topics; recent developments and current literature; coordination compounds, nonaqueous solvents, unusual oxidation states, and less familiar elements.

226. Advanced Analytical Chemistry (3)

Prerequisite: Chem 110A-B, 111A-B. Theory, application, recent developments and literature of organic and inorganic analysis; topics include instrumental theory, functional group analysis, microchemistry, separations and physical measurements.