2A-B. Introductory General Chemistry (3-3)

Prerequisite: high school algebra, plane geometry or Math 28 (concurrently). Composition of matter and physical and chemical changes; fundamental laws and principles; atomic and molecular structure, qualitative and quantitative techniques; introduction to organic chemistry and biochemistry. (2 lecture, 3 lab hours)

6. Quantitative Analysis (4)

Prerequisite: Chem 1B. Principles and methods of volumetric analysis. (2 lecture, 6 lab hours)

8. Elementary Organic Chemistry (3)

Not open to chemistry majors. Recommended for students requiring a rapid coverage of the field. Prerequisite: Chem 1A or 2A-B. Survey of the aliphatic and aromatic compounds of carbon.

Phy Sc 12. Introduction to Physical Science (3) (See Phy Sc 12)

99. Glass Blowing (1)

Enrollment limited with preference to junior and senior chemistry majors. Elements of glass blowing; construction and repair of glass apparatus. (3 lab hours)

101. Introductory Physical Chemistry (3)

Not open to chemistry majors. Prerequisite: logarithms, elementary algebra; organic chemistry, quantitative analysis. Kinetic theory of gases, liquids, solutions, buffers, conductance, electromotive force cells, reaction kinetics, colloidal systems, radioactivity, nuclear fission. (3 lecture-demonstration hours)

105. Quantitative Analysis (4)

Not open to chemistry majors. Prerequisite: Chem 1B or 2A-B. Rapid coverage of principles and methods of volumetric and gravimetric analysis. (2 lecture, 6 lab hours)

106. Quantitative Analysis (4)

Prerequisite: Chem 6 or 105 and permission of instructor. Gravimetric and advanced qualitative analysis; elements, compounds, alloys and minerals. (2 lecture, 6 lab hours)

109. Elementary Organic Chemistry Laboratory (3)

Not open to chemistry majors. Prerequisite or concurrently: Chem 8. Laboratory study of the carbon compounds with coordinating lectures. (1 lecture, 6 lab hours)

110A-B. Physical Chemistry (3-3)

Prerequisite: Chem 105 or 106; 128 A or 8; Physics 4A and B or C, or 2A-B; Math 4. Fundamental laws and theories.

111A-B. Physical Chemical Measurements (1-2)

Accompanies Chem 110A-B. (3 or 6 lab hours)

115. Intermediate Physical Chemistry (3) (Former Chem 118)

Prerequisite: Chem 110A-B. Selected topics in modern physical chemistry. (3 lecture-demonstration hours)

121. Inorganic Preparations (3)

Prerequisite: Chem 6 or 105. Preparation of inorganic compounds; development of technique, use of laboratory instruments; correlation of theory with practice; current literature. (1 lecture, 6 lab hours)