
CHEMISTRY

CHM 1025, Introduction to General Chemistry Introduction to General Chemistry

3 hrs., 3 crs.,

Prerequisite: MAT 1033 or MAC 1105. An introduction to the elementary principles of modern chemistry. This course is designed for students whose preparation in secondary school chemistry and mathematics is such that they require a prerequisite course for general chemistry. (This course does not meet the chemistry requirement for science majors.)

CHM 1032, General, Organic, Biochemistry General, Organic, Biochemistry

3 hrs., 3 crs.,

(Offered fall and spring). Prerequisite: Math placement test or minimum grade of "C" in a college-level math course. This course covers fundamental topics in general and organic chemistry and selected topics in biochemistry.

CHM 1040, Fundamentals of Chemistry Fundamentals of Chemistry

3 hrs., 3 crs.,

(Offered fall, spring, and summer). Prerequisite: Satisfactory mathematics placement on the College-Level Placement Test or completion of MAT1033 or MAC1105 with a minimum grade of "C." This course covers the fundamentals of chemistry with emphasis on descriptive chemistry. It includes topics in equations, stoichiometry, the Periodic Table, gas laws, nuclear chemistry, acids-bases, pH, and selected topics in carbon chemistry. (This course does not meet the chemistry requirement for science majors.)

CHM 1045, General Chemistry General Chemistry

3 hrs., 3 crs.,

(Offered fall and spring). Prerequisites: CHM1025 with a minimum grade of "C" or satisfactory completion of CHM1025 exemption exam and MAC1105. Corequisites: CHM1045L and MAC1140. This course is designed for students pursuing careers in the sciences or who need a more rigorous presentation of chemical concepts than is offered in an introductory course. Students will engage in problem solving and critical thinking while applying chemical concepts. Topics will include the principles of chemistry including atomic theory, electronic and molecular structure, measurement, stoichiometry, bonding, periodicity, thermochemistry, nomenclature, solutions, and the properties of gases.

CHM 1045H, Honors General Chemistry Honors General Chemistry

3 hrs., 3 crs.,

(Offered fall and spring). Prerequisites: CHM1040 with a minimum grade of "C" or satisfactory completion of CHM1040 completion exam and MAC1105. Corequisites: CHM 1045L and MAC1140. Topics covered are chemical calculations, inorganic nomenclature, chemical reactions, thermochemistry, gases, atomic structure, configurations, periodicity, oxidation-reduction, and chemical bonding, including MO and VSEPR theory.

CHM 1045L, General Chemistry Laboratory General Chemistry Laboratory

3 hrs., 1 cr.,

\$52.00 lab fee. (Offered fall and spring). Corequisite: CHM1045. This course explores chemical and physical properties of substances, types of chemical reactions, energy changes, chemical separations, and quantitative analysis procedures. Designed to accompany the lecture, this laboratory enhances the student's understanding of the lecture topics and teaches basic chemical laboratory techniques.

CHM 1046, General Chemistry and Qualitative Analysis General Chemistry and Qualitative Analysis

3 hrs., 3 crs.,

(Offered spring and summer). Prerequisites: MAC1140 with a minimum grade of "C" and CHM1045 or the equivalent. Corequisite: CHM1046L. Topics include solids, liquids, gases, colligative properties, kinetics, gaseous equilibria, nuclear chemistry, weak electrolyte equilibria, solubility equilibria, entropy, free energy, and electrochemistry.

CHM 1046H, Honors General Chemistry And Qualitative Analysis Honors General Chemistry And Qualitative Analysis**3 hrs., 3 crs.,**

(Offered spring and summer). Prerequisites: MAC1140 with a minimum grade of ?C? and CHM1045 or the equivalent. Corequisite: CHM1046L. Topics include solids, liquids, gases, colligative properties, kinetics, gaseous equilibria, nuclear chemistry, weak electrolyte equilibria, solubility equilibria, entropy, free energy, and electrochemistry.

CHM 1046L, General Chemistry And Qualitative Analysis Lab General Chemistry And Qualitative Analysis Lab**3 hrs., 1 cr.,**

\$41.00 lab fee. (Offered spring and summer). Corequisite: CHM1046. This course emphasizes quantitative analysis techniques to expand the student's knowledge of oxidation-reduction, colligative properties, reaction rates, electrochemistry, chemical equilibrium and electrolytes. Designed to accompany the lecture, this laboratory enhances the student's understanding of the lecture topics and teaches basic chemical laboratory techniques.

CHM 2210, Organic Chemistry I Organic Chemistry I**3 hrs., 3 crs.,**

(Offered fall). Prerequisite: CHM1046, CHM1046L. Corequisite: CHM2210L. A course in reactions, preparations, nomenclature, stereochemistry, conjugation, resonance, nucleophilic aliphatic substitutions, and elimination in alkanes, alkenes, alkynes, alkyl halides, alcohols, ethers, and cyclics, with an extensive introduction to organic synthesis.

CHM 2210L, Organic Chemistry I Laboratory Organic Chemistry I Laboratory**3 hrs., 1 cr.,**

\$132.00 lab fee. (Offered fall). Corequisite: CHM2210. An accompanying course to Organic Chemistry I. Designed to accompany the lecture. This laboratory enhances the student's understanding of lecture topics and teaches basic organic laboratory techniques.

CHM 2211, Organic Chemistry II Organic Chemistry II**3 hrs., 3 crs.,**

(Offered spring). Prerequisite: CHM2210. Corequisite: CHM2211L. A course covering the reactions, preparations, nomenclature, stereochemistry, conjugation, and resonance in aromatic and carbonyl compounds, amines, heterocyclics, phenols, and their derivatives, including organic synthesis and a comprehensive in-depth study of organic spectroscopy.

CHM 2211L, Organic Chemistry II Laboratory Organic Chemistry II Laboratory**3 hrs., 1 cr.,**

\$91.00 lab fee. (Offered spring). Corequisite: CHM2211. An accompanying course to Organic Chemistry II. Designed to accompany the lecture. This laboratory enhances the student's understanding of lecture topics and teaches basic organic laboratory techniques.

CHM 2949, COOP/Work Experience/Chemistry COOP/Work Experience/Chemistry**1 hr., 1 cr.,**

1-3 crs. Cooperative Education courses may be taken toward completion of most of the Associate in Arts and Associate in Science degree programs. A maximum of six credit hours may be used in meeting the A.A. degree requirements. Prerequisite: Minimum of 2.0 GPA, meet with the co-op coordinator, and availability of co-op work experience slot. Supervised, practical work experience that seeks to combine theories and apply practical skills to projects in the student's major field of study. Requirements include online weekly, mid-term, and end-of-term reflection assignments.
