CHEMISTRY (CHEM)

CHEM 1000 Chemistry Recitation
1.0 credit hours
15.0 Classroom Hours = 15.0 Lecture Hours
This course is designed for students who have a weak or limited mathematics or science background. The recitation class will reinforce the objectives presented during the lecture portion of the course with additional individualized and group instruction.

CHEM 1050 Survey of Chemistry I
4.0 credit hours
75.0 Classroom Hours = 45.0 Lecture Hours + 30.0 Lab Hours
This course is for non-science major students to study basic chemistry principles, methods and techniques. Study of electronic configurations of atoms, characteristic properties of groups of elements, periodic table, the naming of chemical compounds, chemical reactions, the calculations in chemical reactions and gas laws. Prerequisites: Two years of high school algebra or one year of high school algebra and MATH 1010, or permission of instructor. Fee $15 if course is taken on-ground.

CHEM 1051 Survey of Chemistry I Lab
0.0 credit hours
0 Classroom Hours
Lab for Survey of Chemistry I. If taken online, students will need to purchase a lab kit for approximately $225 from an outside vendor for this laboratory course in lieu of normal course fee.

CHEM 1060 Survey of Chemistry II
4.0 credit hours
75.0 Classroom Hours = 45.0 Lecture Hours + 30.0 Lab Hours
Continuation of CHEM 1050 with an introduction to organic chemistry and nuclear chemistry. Study of radioactivity, nuclear decay, nuclear fission and fusion, functional groups, the structure, isomer, nomenclature, properties of organic compounds and the basic reactions in organic chemistry. Prerequisite: CHEM 1050 or permission of instructor. Fee $15.

CHEM 1061 Survey of Chemistry II Lab
0.0 credit hours
0 Classroom Hours
Lab for Survey of Chemistry II.

CHEM 1090 General Chemistry I
4.0 credit hours
90.0 Classroom Hours = 45.0 Lecture Hours + 45.0 Lab Hours
This is the first course of a comprehensive chemistry sequence. Topics include nomenclature, atomic structure, chemical reactions, essentials of bonding, periodic properties, Valence Shell Electron Pair Repulsion Theory (VSEPR) theory, modern bonding theories, stoichiometry, thermochemistry, and the chemistry of solids, liquids, & gasses. Prerequisites: MATH 1010 or Appropriate College Level Math Score. Fee $15.

CHEM 1091 General Chemistry I Lab
0.0 credit hours
0 Classroom Hours
Lab for General Chemistry I.

CHEM 1100 General Chemistry II
4.0 credit hours
90.0 Classroom Hours = 45.0 Lecture Hours + 45.0 Lab Hours
This is the second course of a comprehensive chemistry sequence. Topics include solutions, kinetics, equilibrium, acid-base reactions, solubility, thermodynamics, and electrochemistry. Prerequisite: CHEM 1090. Fee $15.

CHEM 1101 General Chemistry II Lab
0.0 credit hours
0 Classroom Hours
Lab for General Chemistry II.

CHEM 2510 Organic Chemistry I
4.0 credit hours
75.0 Classroom Hours = 45.0 Lecture Hours + 30.0 Lab Hours
Topics in this course include the structure and properties of carbon compounds; including acid-based chemistry as it relates to organic chemistry, the classification of organic molecules by functional groups, structure, nomenclature, properties, stereochemistry, radicals, substitution and elimination reactions. Topics may also include: spectroscopy. Students registering for this course must also register for CHEM 2511. Prerequisite: CHEM 1090 with at least a C. Fee: $15

CHEM 2511 Organic Chemistry I Lab
0.0 credit hours
0 Classroom Hours
Lab for Organic Chemistry I.

CHEM 2520 Organic Chemistry II
4.0 credit hours
75.0 Classroom Hours = 45.0 Lecture Hours + 30.0 Lab Hours
A continuation of CHEM 2510. Topics in this course include the structure and properties of carbon compounds; including nomenclature, stereochemistry and spectroscopy of alcohols, phenols, ethers, epoxides, aromatic compounds, aldehydes, ketones, carboxylic acids & their derivatives, and amines. Students registering for this course must also register for CHEM 2521. Prerequisite: CHEM 2510 with a C or better. Fee: $15

CHEM 2521 Organic Chemistry II Lab
0.0 credit hours
0 Classroom Hours
Lab for Organic Chemistry II.

CHEM 2980 Directed Study
3.0 credit hours
45.0 Classroom Hours = 45.0 Lecture Hours
Directed Study

CHEM 2990 Special Topics
3.0 credit hours
45.0 Classroom Hours = 45.0 Lecture Hours
Special topic course description upon request.