CHEMISTRY (CHEM)

CHEM110 Foundations of General, Organic, and Biochemistry 4 credits (4 lec hrs/wk)
Prerequisite(s): (MTH65) or (MTH98)
This is a survey of chemistry from atomic structure through biochemistry. CHEM 110 is primarily for students in pre-nursing, some allied health fields, and students who need a brief introduction to chemistry that includes organic and biochemistry. The course does not have an associated lab.
This course may be taken 1 time for credit.
Course classification: LDC

CHEM180 Internship: Chemistry 1-12 credits (3 lab hrs/wk/cr)
Prerequisite(s): Instructor consent
Practical on-site experience that will allow students to explore workplace environments and career options.
This course may be taken 12 times for credit.
Course classification: LDC

CHEM221 General Chemistry I 5 credits (4 lec, 3 lab hrs/wk)
Prerequisite(s): (MTH95)
The first course in the general chemistry sequence for science, engineering and health pre-professional students. Topics include: measurement, atomic structure, molecular structure, chemical reactions, stoichiometry, and thermochemistry. This course includes a laboratory component.
This course may be taken 1 time for credit.
Course classification: LDC

CHEM222 General Chemistry II 5 credits (4 lec, 3 lab hrs/wk)
Prerequisite(s): (CHEM221)
The second course in the general chemistry sequence for science, engineering and health pre-professional students. Topics include: states of matter (gases, liquids, and solids), solutions, chemical kinetics, chemical equilibrium, and acid/base chemistry. This course has a laboratory component.
This course may be taken 1 time for credit.
Course classification: LDC

CHEM223 General Chemistry III 5 credits (4 lec, 3 lab hrs/wk)
Prerequisite(s): (CHEM222)
The third course in the general chemistry sequence for science, engineering and health pre-professional students. Topics include: Acid / Base equilibrium, ionic equilibrium, thermodymanics, electrochemistry, nuclear chemistry, coordination chemistry, and organic chemistry. This course includes a laboratory component.
This course may be taken 1 time for credit.
Course classification: LDC

CHEM245 Organic Chemistry I 4 credits (3 lec, 3 lab hrs/wk)
Prerequisite(s): (CHEM223)
The first course of a three-term sequence in organic chemistry for students interested in the sciences, chemical engineering, and professional health programs. Topics include the structure of organic molecules, organic functional groups, stereochemistry, reaction mechanisms, and spectroscopy. Includes laboratory component. May be eligible for upper division credit at a four-year institution.
This course may be taken 1 time for credit.
Course classification: LDC

CHEM246 Organic Chemistry II 4 credits (3 lec, 3 lab hrs/wk)
Prerequisite(s): (CHEM245)
The second course of a three-term sequence in organic chemistry for students interested in the sciences, chemical engineering, and professional health programs. Topics include nucleophilic substitution at the carbonyl group and saturated carbons, organometallic compounds, elimination and addition reactions, and electrophilic and nucleophilic aromatic substitution. Includes a laboratory component. May be eligible for upper division credit at a four-year institution.
This course may be taken 1 time for credit.
Course classification: LDC

CHEM247 Organic Chemistry III 4 credits (3 lec, 3 lab hrs/wk)
Prerequisite(s): (CHEM246)
The third course of a three-term sequence in organic chemistry for students interested in the sciences, chemical engineering, and professional health programs. Topics include the chemistry of enols and enolate ions, radical chemistry, selectivity in chemical synthesis, retrosynthetic analysis, symmetric synthesis, and biological macromolecules. Includes a laboratory component. May be eligible for upper division credit at a four-year institution.
This course may be taken 1 time for credit.
Course classification: LDC

CHEM280 CWE: Chemistry 1-12 credits (3 lab hrs/wk/cr)
Prerequisite(s): Instructor consent
Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.
This course may be taken 12 times for credit.
Course classification: LDC