Chemistry Electives 2022-23

The courses listed below will fulfill the CHEM elective requirement (6 credit hours) for CHBE Standard Option students:

**CHEM 3111  Inorganic Chemistry (FALL only)**
A study of the reactions and structures of inorganic compounds and principles, generalizations and theories that assist in understanding their behavior. Prereq: CHEM 2312/2313 + CHEM 1212K.

**CHEM 3412  Physical Chemistry II (FALL and SPRING)**
Quantum mechanics, atomic and molecular structure, bonding theory, molecular spectroscopy, statistical mechanics. Prereq: CHEM 1212K and PHYS 2212.

**CHEM 3511  Survey of Biochemistry (ALL semesters, incl. SUMMER)**
Introductory course in biochemistry dealing with the chemistry and biochemistry of proteins, lipids, carbohydrates, nucleic acids, and other biomolecules. Prereq: CHEM 2312/2313 or CHEM 1315.

**CHEM 4311  Adv. Organic Chemistry (FALL only)**
Construction reactions and functional group interconversions as applied to multistep organic synthesis. Prereq: CHEM 2312/2313.

**CHEM 4341  Applied Spectroscopy (FALL only)**
Theory and application of NMR, mass spectrometry, and infrared spectroscopy in the determination of organic structures. Prereq: CHEM 2312/2313.

**CHEM 4511  Biochemistry I (FALL and SPRING)**
The chemistry and biochemistry of proteins, lipids, carbohydrates, nucleic acids, and other biomolecules. Prereq: CHEM 2311.

**CHEM 4512  Biochemistry II (FALL and SPRING)**
The chemistry and biochemistry of proteins, lipids, carbohydrates, nucleic acids, and other biomolecules. Prereq: CHEM 4511 and CHEM 2312/2313.

No credit awarded for both CHEM 3511 and CHEM 4511. For students on catalog years prior to 2015-16, CHEM electives do not always auto-fill in DegreeWorks. The exception entry is manual, and this is usually done prior to an advising appointment or when you complete your graduation application.

Updated 3/15/2022