

COURSE DESCRIPTIONS BY COURSE DISCIPLINE PREFIX

CHM CHEMISTRY

CHM-130 **Gen, Org, & Biochemistry** **3 (3-0)** **Fall**

Prerequisites: None

Corequisites: CHM-130A^L

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Sciences Gen. Ed. course for A.A.S. and A.G.E.

CHM-130A **Gen, Org, & Biochem Lab** **1 (0-2)** **Fall**

Prerequisites: None

Corequisites: CHM-130^S

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Natural Sciences Gen. Ed. course for A.A.S. and A.G.E.

CHM-151 **General Chemistry I** **4 (3-3)** **Fall
Spring
Summer**

Prerequisites: MAT-003 w/P2L, BSP-4003 w/P2L, MAT-021^L, MAT-043^L, MAT-052^L, or MAT-071^L

Corequisites: None

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.A., A.A. Teacher Preparation, A.E., A.F.A., A.S. and A.S. Teacher Preparation
- Natural Sciences Gen. Ed. course for A.A.S. and A.G.E.

CHM-152	General Chemistry II	4 (3-3)	Fall Spring Summer
----------------	-----------------------------	----------------	-----------------------------------

Prerequisites: CHM-151^S, minimum grade CL

Corequisites: None

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields.(1997 SU) This course has been approved to satisfy the following requirement(s):

- UGETC course for A.S. and A.S. Teacher Preparation
- Natural Science Gen. Ed. course for A.A. and A.A. Teacher Preparation
- Other Gen. Ed. and Premajor Elective course for A.E.
- Natural Sciences Gen. Ed. course for A.G.E.

CHM-251	Organic Chemistry I	4 (3-3)	Fall
----------------	----------------------------	----------------	-------------

Prerequisites: CHM-152^S, minimum grade CL

Corequisites: None

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective course for A.E.
- Natural Sciences Gen. Ed. course for A.G.E.

CHM-252	Organic Chemistry II	4 (3-3)	Spring
----------------	-----------------------------	----------------	---------------

Prerequisites: CHM-251^S, minimum grade CL

Corequisites: None

This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields.(1997 SU) This course has been approved to satisfy the following requirement(s):

- Premajor and/or Elective course for A.A. and A.S.
- Other Gen. Ed. and Premajor Elective course for A.E.
- Natural Science Gen. Ed. course for A.G.E.