

CHEMISTRY (CHEM)

CHEM 1121, Chemistry Laboratory I (1 Credit Hour)

0 lecture hours per week, 3 lab hours per week, 3 contact hours per week

Safety; basic laboratory techniques (to include data collection and interpretation; introduction to laboratory reporting/record keeping) related to the topics in Chemistry I. This course requires a lab fee.

Prerequisite(s): CHEM 1123* or 1010.

* May be taken concurrently.

CHEM 1123, Chemistry I (3 Credit Hours)

3 lecture hours per week, 0 lab hours per week, 3 contact hours per week

This course introduces fundamental laws, modern theories, and principles of general chemistry. The emphasis will be concentrated on matter and measurement, atomic structure, and the electronic structure of atoms. This course requires a fee for course materials.

Prerequisite(s): MATH 1213, 1100 or 1203.

CHEM 1131, Chemistry Laboratory II (1 Credit Hour)

0 lecture hours per week, 3 lab hours per week, 3 contact hours per week

Safety; basic; laboratory techniques related to topics in Chemistry II. This course requires a lab fee.

Prerequisite(s): CHEM 1133* or 1020.

* May be taken concurrently.

CHEM 1133, Chemistry II (3 Credit Hours)

3 lecture hours per week, 0 lab hours per week, 3 contact hours per week

Intermolecular forces; thermodynamics; general and heterogeneous equilibrium; kinetics; solutions; acid/ base equilibrium and properties; and electrochemistry. This course requires a fee for course materials.

Prerequisite(s): CHEM 1123 or 1010.

CHEM 2211, Organic Chemistry Lab I (1 Credit Hour)

0 lecture hours per week, 3 lab hours per week, 3 contact hours per week

Safety; basic laboratory techniques related to the topics in Organic Chemistry I.

Prerequisite(s): CHEM 2213* or 2210.

* May be taken concurrently.

CHEM 2213, Organic Chemistry I (3 Credit Hours)

3 lecture hours per week, 0 lab hours per week, 3 contact hours per week

Nomenclature, chemical reactions, synthesis, functional groups, structure/property relationships, stereochemistry, spectroscopy, and mechanistic theory.

Prerequisite(s): (CHEM 1133 or 1020) and (MATH 1213 or 1100).

CHEM 2221, Organic Chemistry Lab II (1 Credit Hour)

0 lecture hours per week, 3 lab hours per week, 3 contact hours per week

Safety; basic laboratory techniques related to the topics in Organic Chemistry II.

Prerequisite(s): (CHEM 2213 or 2210) and (CHEM 2211 or 2210L) and (CHEM 2223* or 2210).

* May be taken concurrently.

CHEM 2223, Organic Chemistry II (3 Credit Hours)

3 lecture hours per week, 0 lab hours per week, 3 contact hours per week

Continuation of topics in synthesis, mechanisms, and properties of organic compounds.

Prerequisite(s): CHEM 2213 or 2210.