

AGS General Studies Chemistry

Courses descriptions

CHEM 130 GENERAL CHEMISTRY LECTURE - [LCCN: CCEM 1103, CHEMISTRY I

(NON-SCIENCE MAJORS)] An introduction to nomenclature; atomic structure; chemical equations and stoichiometry; gas laws; bonding; quantitative problem solving; energy relationships, and solutions. (3-0-3)

CHEM 130L GENERAL CHEMISTRY LABORATORY - [LCCN: CCEM 1101, CHEMISTRY I LAB (Non-Science Majors)] Safety; basic laboratory techniques (to include data collection and interpretation; introduction to laboratory reporting/record keeping) related to the topics in Chemistry I. (0-2-1)

CHEM 131 GENERAL CHEMISTRY LECTURE II - [LCCN: CCEM 1113, CHEMISTRY

II (Non-Science Majors)] An introduction to special topics in chemistry, which may include basic organic and biochemistry, acid/base, and others. Topics may vary.
Prerequisite: Chemistry 130, Chemistry 130L. (3-0-3)

CHEM 131L GENERAL CHEMISTRY LABORATORY II - [LCCN: CCEM 1111, CHEMISTRY II LAB (Non-Science Majors)] Safety; basic laboratory techniques related to the topics in Chemistry II. **Prerequisite:** Chemistry 130L. (0-2-1)

CHEM 132 GENERAL CHEMISTRY LECTURE I - [LCCN: CCEM 1123, CHEMISTRY I

(Science Majors)] Nomenclature, atomic and molecular structure, chemical equations and stoichiometry, gas laws, bonding, quantitative problem solving, introduction to periodicity, energy relationships and solutions. (3-0-3)

CHEM 132L GENERAL CHEMISTRY LABORATORY I - [LCCN: CCEM 1121, CHEMISTRY I LAB (Science Majors)] Safety, basic laboratory techniques (to include data collection and interpretation, introduction to laboratory reporting/record keeping) related to the topics in Chemistry I for science majors. (0-2-1)

CHEM 133 INORGANIC AND EQUILIBRIUM CHEMISTRY LECTURE II - [LCCN: CCEM 1133, CHEMISTRY II (Science Majors)] Intermolecular forces; thermodynamics; general and heterogeneous equilibrium; kinetics; solutions; acid/base equilibrium and properties and electrochemistry. (3-0-3)

CHEM 133L INORGANIC AND EQUILIBRIUM CHEMISTRY LABORATORY - Focuses

on the synthesis and physical characterization of inorganic compounds; spectroscopy and other synthetic procedures are emphasized in this laboratory. This course is taken concurrently with CHEM 133 Inorganic and Equilibrium Chemistry lecture course. Prerequisites: CHEM 132 and CHEM 132L (0-2-1)

CHEM 230 ORGANIC CHEMISTRY I LECTURE-[LCCN:CCEM 2213, ORGANIC CHEMISTRY I] Nomenclature, chemical reactions, synthesis, functional groups, structure/property relationships, stereochemistry, spectroscopy, and mechanistic theory are covered. (Pre-professional; Science Majors) Prerequisites: Chemistry 130, 131, Lab., 131L. (3-0-3)

CHEM 230L ORGANIC CHEMISTRY I LABORATORY - [LCCN: CCEM 2211, ORGANIC CHEMISTRY I] Safety, basic laboratory techniques, related to the topics in Organic Chemistry I. Prerequisites: Chemistry 130L and 131L. (0-2-1)

CHEM 231 ORGANIC CHEMISTRY II LECTURE - [LCCN: CCEM 2223, Organic Chemistry II] This course is a continuation of topics in Organic Chemistry I. Prerequisite: Chemistry 230. (3-0-3)

CHEM 231L ORGANIC CHEMISTRY II LABORATORY - [LCCN: CCEM 2221, ORGANIC CHEMISTRY II] Safety; basic laboratory techniques related to the topics in Organic Chemistry II. Prerequisite: Chemistry 230L. (0-2-1)

CHEM 251 INORGANIC, ORGANIC AND BIOCHEMISTRY - [LCCN: CCEM 1003, General, Organic & Biochemistry] A survey of general, organic, and bio-chemistry; primarily for Nursing and Allied Health. Prerequisites: CHEM 130. (3-0-3)

CHEM 251L INORGANIC, ORGANIC AND BIOCHEMISTRY LAB - This course covers inorganic, organic and biochemistry experiments. Topics include solubility, extraction, reactivity and electrophoresis. Prerequisite: CHEM 130L. (0-2-1)