

CHEMISTRY (CHEM)

CHEM 102 - Fundamental Chemistry II (4 Credits)

An introductory survey of organic and biochemistry. Three lecture, one recitation, and two laboratory hours per week.

Prerequisites: 1 year high-school chemistry, CHEM 101, CHEM 111, or equivalent.

Carolina Core: SCI

CHEM 105 - Chemistry and Modern Society I (4 Credits)

A conceptual and qualitative approach to chemistry, its evolution, achievements, and goals and its impact on technology, the environment, and modern life and thought. (Specifically designed for non-science majors.) Three lecture and three laboratory hours per week.

Carolina Core: SCI

CHEM 106 - Chemistry and Modern Society II (3 Credits)

A continuation of Chemistry 105. Three lecture hours per week.

Prerequisites: C or higher in CHEM 105.

CHEM 106L - Chemistry and Modern Society II Laboratory (1 Credit)

Laboratory associated with CHEM 106. Three hours of laboratory per week.

Prerequisites: CHEM 105.

Corequisite: CHEM 106.

CHEM 107 - Forensic Chemistry (4 Credits)

Surveys chemical aspects of criminal investigation and adjudication including drug, arson, DNA, paint, and fiber identification. Three lecture and three laboratory hours per week.

Carolina Core: SCI

CHEM 111 - General Chemistry I (3 Credits)

Survey of the principles that underlie all chemistry with applications illustrating these principles. Three lecture and one recitation hours per week.

Prerequisites: C or higher in MATH 111, MATH 115, MATH 122, MATH 141 or higher math (or by placement score into MATH 122, MATH 141 or higher math).

Corequisite: CHEM 111L (unless grade of C or higher in CHEM 111L earned previously).

Carolina Core: SCI

CHEM 112 - General Chemistry II (3 Credits)

Continuation of CHEM 111. Special emphasis on chemical equilibrium. Three lecture and one recitation hours per week.

Prerequisites: C or higher in CHEM 111 and C or higher in MATH 111, MATH 115, MATH 122, MATH 141 or higher math.

Corequisite: CHEM 112L.

Carolina Core: SCI

CHEM 118 - Computational Chemistry I (1 Credit)

Introduction to the use of computers in solving chemical problems. One discussion and two laboratory hours per week.

Corequisite: CHEM 112 and CHEM 112L or CHEM 142 (unless a grade of C or higher earned previously).

CHEM 321 - Quantitative Analysis (3 Credits)

Gravimetric, volumetric, and introductory instrumental analysis. Three lecture and one recitation hours per week.

Prerequisites: C or higher in CHEM 112 and CHEM 112L or in CHEM 142.

Corequisite: CHEM 321L.

CHEM 321L - Quantitative Analysis Laboratory (1 Credit)

Three laboratory hours per week. Credit cannot be received for both CHEM 321L and CHEM 322L.

Corequisite: CHEM 321.

CHEM 331L - Essentials of Organic Chemistry Laboratory I (1 Credit)

Laboratory safety, syntheses, separation, and purification of carbon compounds. For non-majors.

Corequisite: CHEM 333 (unless grade of C or higher in CHEM 333 earned previously).

CHEM 332L - Essentials of Organic Chemistry Laboratory II (1 Credit)

Continuation of CHEM 331L. Spectroscopic identification of carbon compounds. For non-majors. Three lab hours per week.

Prerequisites: C or higher in CHEM 331L.

Corequisite: CHEM 334 (unless grade of C or higher in CHEM 334 earned previously).

CHEM 333 - Organic Chemistry I (3 Credits)

Contemporary theories, nomenclature, reactions, mechanisms, and syntheses of carbon compounds. Three lecture and one recitation hours per week.

Prerequisites: C or higher in CHEM 112 or in CHEM 142.

CHEM 333L - Comprehensive Organic Chemistry Laboratory I (2 Credits)

Laboratory safety, synthesis, separation, and purification of carbon compounds. Required for chemistry majors. Six laboratory hours per week.

Corequisite: CHEM 333 (unless grade of C or higher in CHEM 333 earned previously).

CHEM 334 - Organic Chemistry II (3 Credits)

Continuation of CHEM 333. Three lecture and one recitation hours per week.

Prerequisites: C or higher in CHEM 333.

CHEM 334L - Comprehensive Organic Chemistry Laboratory II (2 Credits)

Continuation of CHEM 333L. Spectroscopic identification of carbon compounds. Required for chemistry majors. Six laboratory hours per week.

Prerequisites: C or higher in CHEM 333L.

Corequisite: CHEM 334 (unless grade of C or higher in CHEM 334 earned previously).