4. General Chemistry Courses at UNR

There are three tracks of introductory chemistry at the University of Nevada:

A. CHEM 100
Core science course for non-science majors. This course does not serve as a prerequisite for any higher chemistry course. See Class Schedule for dates of laboratories.

**CHEM 100 MOLECULES AND LIFE IN THE MODERN WORLD (3+1) 3 credits**
Introductory chemistry with emphasis on impacts on human society, environmental issues, energy sources, and life processes. Includes four laboratory experiments. Prerequisite: Core math requirement; or Corequisite: MATH 128 or higher Core math course.

B. CHEM 121A/121L & 122A/122L
Two-semester lecture and laboratory Core science course for all majors requiring General or Organic Chemistry but not advanced courses in chemistry or molecular science. Students should co-enroll in the lecture (CHEM 121A or 122A) and the corequisite laboratory (CHEM 121L or 122L) in the same semester. Both CHEM 121A and 122L are prerequisites for CHEM 122A and CHEM122L serve as prerequisites for CHEM 220A Introductory Organic Chemistry or CHEM 241 & 242 Organic Chemistry I & II. Note that CHEM 201 & 202 is the preferred prerequisite for CHEM 341 & 342 Organic Chemistry for Scientists and Professionals I & II, however CHEM 121A/122L & 122A/122L serves as an acceptable prerequisite.

**121A GENERAL CHEMISTRY I (3+0) 3 credits**
Fundamentals of chemistry including reaction stoichiometry, atomic structure, chemical bonding, molecular structure, states of matter and thermochemistry. Prerequisite: Core mathematics requirement (MATH 128 or higher recommended); or corequisite: MATH 128 or higher core math course. Credit allowed only in one of CHEM 121, CHEM 121A, CHEM 201.

**121L GENERAL CHEMISTRY LABORATORY I (0+3) 1 credit**
Laboratory for CHEM 121A. Corequisite: CHEM 121A. Prerequisite: Core mathematics requirement (MATH 128 or higher recommended); or corequisite: MATH 128 or higher core math course.

**122A GENERAL CHEMISTRY II (3+0) 3 credits**
Fundamentals of chemistry including solutions, kinetics, equilibria, thermodynamics, electrochemistry, nuclear chemistry, and properties of inorganic and organic compounds. Prerequisites: CHEM 121A, CHEM 121L, and MATH 128 or higher Core math course. Credit allowed only in one of CHEM 122, CHEM 122A, or CHEM 202.

**122L GENERAL CHEMISTRY LABORATORY II (0+3) 1 credit**
Laboratory of CHEM 122A. Corequisite: CHEM 122A. Prerequisite: CHEM 121A, CHEM 121L, and MATH 128 or higher Core math course.

C. CHEM 201 & 202
Two-semester lecture and laboratory Core science course for chemistry, biochemistry, molecular biology, chemical engineering, and other physical sciences and engineering majors requiring advanced courses in chemistry and molecular science, and Honors Program students. CHEM 201 & 202 cover similar material as 121A/121L & 122A/122L, but
are more in-depth and mathematically more rigorous. CHEM 201 & 202 serve as prerequisites for CHEM 241 & 242 Organic Chemistry I & II or CHEM 341 & 342 Organic Chemistry for Scientists and Professionals I & II.

201 GENERAL CHEMISTRY FOR SCIENTISTS AND ENGINEERS I (3+3) 4 credits
Principles of chemistry including stoichiometry, atomic structure, chemical bonding, molecular structure, kinetic theory of gases, solutions, equilibrium, and thermochemistry. Prerequisite: 28 or above on the Math ACT examination and/or a year of high school chemistry. Prerequisite or corequisite: MATH 181. Credit allowed in only one of CHEM 121, 121A, or 201.

202 GENERAL CHEMISTRY FOR SCIENTISTS AND ENGINEERS II (3+3) 4 credits
Principles of chemistry including thermodynamics, electrochemistry, chemical kinetics, nuclear chemistry, metals and non-metals, coordination compounds, and properties of inorganic, organic, and biological molecules. Prerequisites: CHEM 201 (CHEM 121 acceptable with a grade of A or B); and MATH 181. Credit allowed in only one of CHEM 122, 122A, or 202.