UNLV ✯ B.S. Chemistry (CHEBS) 2012-2014 Catalog

UNLV UNIVERSITY AND COLLEGE OF SCIENCES GRADUATION REQUIREMENTS

120 total credits: The minimum number of semester credits required for a bachelor’s degree for a student graduating under the regulations of the 2012 - 2014 Undergraduate Catalog is 120.

Last 30 credits @ NSHE school: A candidate for the baccalaureate degree must complete the last 30 UNLV semester credits in uninterrupted resident credit as a declared major in the degree-granting college. A student must declare a major prior to enrolling in the last 30 UNLV resident credits. (Special examination, physical education activity courses, or correspondence credits are exempted.)

½ credits from a four-year school: At least half of the total credits required for a baccalaureate degree at the institution must be earned at a four-year institution.

Graduation GPA 2.0: In order to graduate, an undergraduate student shall have a minimum cumulative grade point average of 2.00 for the total of all college-level credit attempted at the University of Nevada, Las Vegas (UNLV GPA). College and department GPA requirements must also be met. The College of Sciences requires a cumulative GPA of at least 2.00 for all courses in the major field.

Grades, Date of Course Majors may count no more than one grade of B in chemistry courses toward meeting degree requirements. Chemistry courses taken more than eight years prior to the proposed date of graduation are subject to review by the department, and at the discretion of the department, such courses may not be allowed for application to a degree program. Students potentially affected by this policy should meet with the department chair.

40 upper division credits (300-400): The College of Sciences requires that of the total 120 credits require for the degree, at least 40 credits must be in courses numbered 300 or higher. These include all 300 and 400 level classes taken at UNLV, including those required for the major.

UNLV GENERAL EDUCATION CURRICULUM REQUIREMENTS

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THE UNLV GENERAL EDUCATION CURRICULUM is designed to provide students with the fundamental knowledge and skills necessary to become engaged, concerned citizens of our increasingly complex and diverse world. The curriculum is also designed to prepare students for responsible participation in the world of work and to provide a strong foundation for possible graduate studies. Through the General Education Curriculum, students also acquire the skills necessary to analyze information, think critically, and communicate effectively. The curriculum is divided into major academic areas: Humanities and Fine Arts, Social Sciences, Natural Sciences and Environmental Studies, Mathematics, English and English Composition, and Lifelong Learning. Fulfillment of the General Education Curriculum Requirements ensures a well-rounded education and helps to ensure a comprehensive understanding of various fields of study. The General Education Curriculum Requirements are cumulative. To earn a baccalaureate degree at UNLV, students must complete a minimum of 30 credits in the General Education Curriculum. Students must complete the General Education Curriculum Requirements in sequence, with the exception of Life and Physical Sciences, which may be taken concurrently with the multicultural and international requirement.

HUMANITIES AND FINE ARTS

Two courses (three credits each) from two different humanities areas. See Advisement Report in MyUNLV for course choices. The Chemistry Department strongly recommends that at least one of the Humanities be filled by either Russian or German; in that case the other Humanities requirement must be filled by a course in a different field (not a foreign language). One introductory or appreciation course (three credits) from a fine arts area. See Advisement Report in MyUNLV for course choices.

LIFE AND PHYSICAL SCIENCES AND ANALYTICAL THINKING

Science and Mathematics majors are exempt from this requirement.

SOCIAL SCIENCES

One course each from three different fields for a total of nine credits. Courses used to satisfy the Constitutions requirement may not be used to meet Social Sciences distribution requirements. Note: AAS and ANTH constitute one field. See Advisement Report in MyUNLV for course choices.

MULTICULTURAL AND INTERNATIONAL REQUIREMENTS

A minimum of six credits to be composed of a three-credit multicultural requirement and a three-credit international requirement. Students interested in alternate placement testing should contact the Department of Mathematical Sciences at 702-895-3677.

CHEMISTRY DEGREE REQUIREMENTS

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CHEM121/121L General Chemistry I [Corequisite MATH 127 or 128; Prerequisite C in CHEM 103 or pass Chem Pretest; see--]
CHEM122/122L General Chemistry II
CHEM241 Organic Chemistry I
CHEM347 Laboratory Techniques of Organic Chemistry I
CHEM242 Organic Chemistry II
CHEM348 Laboratory Techniques of Organic Chemistry II
CHEM355 Quantitative Analysis
CHEM355L Quantitative Analysis Laboratory
CHEM402 Scientific Software for the Microcomputer
CHEM421 Physical Chemistry I
CHEM422 Physical Chemistry II
CHEM423 Physical Chemistry Lab
CHEM428 Quantum Chemistry
CHEM431 Advanced Inorganic Chemistry
CHEM447 Advanced Synthesis Laboratory
CHEM455 Instrumental Analysis
CHEM455L Instrumental Analysis Laboratory
CHEM474 Biochemistry I
CHEM491 Senior Seminar in Chemistry
CHEM493 Senior Research I
CHEM494 Senior Research II

Two courses selected from: CHEM 312, 442, 472, 475, 476 or 492

MATH181 Calculus I [Prerequisite ≥ C in MATH 127 or 128]
MATH 182 Calculus II
MATH 283 Intermediate Calculus
MATH 431 Mathematics for Scientists and Engineers I

STATISTICS:

STAT 152 Intro to Stats, OR 411 Stat Methods I AND 412 Stat Methods II, OR 491 Stats for Sci I AND 492 Stats for Sci II

PHYSICS:

PHYS 180/180L Physics for Scientists & Engineers I
PHYS 181/181L Physics for Scientists & Engineers II
PHYS 182/182L Physics for Scientists & Engineers III