

# 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 D 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 required 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\*

**30-45 credits**

General education curriculum requirements for students with majors in the College of Sciences. With the exception of the Multicultural/International course requirement, UNLV general education core courses cannot be duplicated across general education core curriculum requirements.	<b>12-21 credits</b>
<b>FIRST YEAR SEMINAR (FYS) REQUIREMENT:</b> Any first year seminar class; (required for First-time Freshmen or change of majors with less than 30 credits, or any student that attended community college high school); must be completed by the end of the freshman year; SCI-101 strongly recommended for science and math majors.	2-3 credits
<b>SECOND YEAR SEMINAR (SYS) REQUIREMENT:</b> Any second year seminar class; currently ENG 231 or 232; required of all Sophomores, including transfer students and change of majors with less than 60 credits	3 credits
<b>ENGLISH COMPOSITION REQUIREMENT:</b> ENG 101 or ENG 101W or ESL 113 or [ENG 101E+101F], and ENG 102 or HON – see Advisement Report in MyUNLV. Must be completed by the end of the sophomore year.	3-9 credits
<b>CONSTITUTIONS REQUIREMENT:</b> Satisfactory completion of courses examining the constitutions of both the United States and the State of Nevada. <i>Transfer</i> students who have already successfully completed a satisfactory 3 semester-credit U.S. Constitutions course from a regionally-accredited institution must successfully complete a satisfactory Nevada Constitutions course (PSC 100 recommended). See Advisement Report in MyUNLV.	4-6 credits
<b>MATHEMATICS REQUIREMENT:</b> The General Education Mathematics requirement will be filled by the math course(s) required in the student's major. Must be completed by the end of the sophomore year. Please see the catalog Admissions Section for current ACT/SAT placement test scores that will guide placement in the appropriate MATH class. Students interested in alternate placement testing should contact the Department of Mathematical Sciences at 702-895-3567.	4 credits shown in major below
<b>DISTRIBUTION REQUIREMENTS:</b>	<b>18 credits</b>
<b>HUMANITIES AND FINE ARTS</b> Two courses (three credits each) from two different humanities areas. See Advisement Report in MyUNLV for course choices. <i>The Chemistry Department strongly recommends that 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).</i> One introductory or appreciation course (three credits) from a fine arts area. See Advisement Report in MyUNLV for course choices.	6 credits 3 credits
<b>LIFE AND PHYSICAL SCIENCES AND ANALYTICAL THINKING:</b> Science and Mathematics majors are exempt from this requirement.	N/A
<b>SOCIAL SCIENCES</b> 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.	9 credits
<b>MULTICULTURAL AND INTERNATIONAL REQUIREMENTS:</b> A minimum of six credits to be composed of a three-credit multicultural requirement and a three-credit international requirement that <i>may simultaneously fulfill other general education core requirements</i> depending on course choices. A single course may not simultaneously meet the multicultural and international requirements. See Advisement Report in MyUNLV for course choices. <i>The Chemistry Department strongly recommends that the International requirement be filled by either Russian or German.</i>	6 credits unless simultaneously filling Hum, FA or SocSci

## \*CHEMISTRY DEGREE REQUIREMENTS\*

**90 credits**

<b>RELATED REQUIREMENTS</b>	GRADES $\geq$ C REQUIRED (ONE D ALLOWED)	
<b>CHEMISTRY REQUIREMENTS:</b>		<b>57 credits</b>
CHEM121/121L General Chemistry I [Corequisite MATH 127 or 128; Prerequisite > C in CHEM 103 or pass Chem Pretest; see--		4 credits
CHEM122/122L General Chemistry II		4 credits
CHEM241 Organic Chemistry I		3 credits
CHEM347 Laboratory Techniques of Organic Chemistry I		1 credits
CHEM242 Organic Chemistry II		3 credits
CHEM348 Laboratory Techniques of Organic Chemistry II		2 credits
CHEM355 Quantitative Analysis		3 credits
CHEM355L Quantitative Analysis Laboratory		2 credits
CHEM402 Scientific Software for the Microcomputer		1 credit
CHEM421 Physical Chemistry I		3 credits
CHEM422 Physical Chemistry II		3 credits
CHEM423 Physical Chemistry Lab		2 credits
CHEM428 Quantum Chemistry		3 credits
CHEM431 Advanced Inorganic Chemistry		3 credits
CHEM447 Advanced Synthesis Laboratory		2 credits
CHEM455 Instrumental Analysis		3 credits
CHEM455L Instrumental Analysis Laboratory		2 credits
CHEM474 Biochemistry I		3 credits
CHEM491 Senior Seminar in Chemistry		1 credit
CHEM493 Senior Research I		1 credit
CHEM494 Senior Research II		2 credits
Two courses selected from: CHEM 312, 442, 472, 475, 476 or 492		6 credits
<b>MATHEMATICS:</b>	MATH181 Calculus I [Prerequisite $\geq$ C in MATH 127 or 128]	4 credits
	MATH 182 Calculus II	4 credits
	MATH 283 Intermediate Calculus	4 credits
	MATH 431 Mathematics for Scientists and Engineers I	3 credits
<b>STATISTICS:</b>	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	3-6 credits
<b>PHYSICS:</b>	PHYS 180/180L Physics for Scientists & Engineers I	4 credits
	PHYS 181/181L Physics for Scientists & Engineers II	4 credits
	PHYS 182/182L Physics for Scientists & Engineers III	4 credits