

UNLV *B.S. Biology with a Cell & Molecular Concentration (BIOCAM) 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.
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

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.	12-21 credits
FIRST YEAR SEMINAR (FYS) REQUIREMENT: 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
SECOND YEAR SEMINAR (SYS) REQUIREMENT: 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
ENGLISH COMPOSITION REQUIREMENT: ENG 101 or ENG 101W or ENG 113 or [ENG 101E+101F], and ENG 102 or ENG 114 or HON – see Advisement Report in MyUNLV. Must be completed by the end of the sophomore year.	3-9 credits
CONSTITUTIONS REQUIREMENT: 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
MATHEMATICS REQUIREMENT: 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.	shown in major below
DISTRIBUTION REQUIREMENTS:	18-24 credits
HUMANITIES AND FINE ARTS Two courses (three credits each) from two different humanities areas. See Advisement Report in MyUNLV for course choices. One introductory or appreciation course (three credits) from a fine arts area. See Advisement Report in MyUNLV for course choices.	6 credits 3 credits
LIFE AND PHYSICAL SCIENCES AND ANALYTICAL THINKING: Science and Mathematics majors are exempt from this requirement.	N/A
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.	9 credits
MULTICULTURAL AND INTERNATIONAL REQUIREMENTS: A minimum of six credits to be composed of a three-credit multicultural requirement and a three-credit international requirement that <i>may</i> simultaneously fulfill other general education core requirements depending on course choices. A single course may not simultaneously meet the multicultural and international requirements. See Advisement Report in MyUNLV for course choices.	6 credits unless simultaneously filling Hum, FA or SocSCI

BIOLOGY CELL & MOLECULAR DEGREE REQUIREMENTS

Minimum overall biology GPA 2.0	
BIOLOGY CORE COURSE REQUIREMENTS: Minimum grade of C- is required in the Biology Core courses	19 credits
BIOL196/196L Biology I [no prerequisite]	4 credits
BIOL197/197L Biology II [no prerequisite]	4 credits
BIOL 351 Microbiology [Prerequisite grade \geq C- BIOL 196, 197; CHEM 121]	4 credits
BIOL300/300L Genetics OR BIOL 304/304D Molecular Genetics [prerequisite: \geq C- BIOL196,197;CHEM241,241L]	4 credits
BIOL415 Evolution [prerequisite: grade \geq C- in BIOL300]	3 credits
BIOTECHNOLOGY UPPER DIVISION COURSE REQUIREMENTS (300 - 400 LEVEL)- SEE COURSE LISTS ON REVERSE SIDE A minimum of 5 courses AND 20 upper division Biology credits are required (not incl BIOL 300, 304, 351 or 415; if 300[304] is used for the Core. 304[300] may be used for List B	20 credits
BIOL 405 Molecular Biology	3 credits
BIOL 425 Genomics	3 credits
BIOL 445 Cell Physiology	3 credits
Select remaining courses from Lists A, B, C, D	11 credits
*Only one credit may be selected from BIOL 492, 493, 494 or 496; BIOL 499 cannot be used toward this requirement	
RELATED COURSE REQUIREMENTS: Minimum Grade passing	37 credits
CHEMISTRY	22 credits
CHEM121/121L General Chemistry I [Prerequisite MATH 126 or placement in MATH 127 OR 128; Prerequisite \geq C in CHEM 103 or pass Chem Pretest; see-- http://sciences.unlv.edu/Chemistry/policy.html]; [Co-requisite MATH 127 or 128]; remaining chemistry classes must be taken in numerical order.	4 credits
CHEM122/122L General Chemistry II	4 credits
CHEM241 Organic Chemistry I	3 credits
CHEM241L Organic Laboratory	1 credits
CHEM242 Organic Chemistry II	3 credits
CHEM242L Organic Laboratory	1 credits
CHEM474 Biochemistry I	3 credits
CHEM475 Biochemistry II	3 credits
<i>Optional Chem minor: additional 9 credits upper division chemistry courses (\geqC in each chemistry class required for a Chemistry minor)</i>	optional
MATHEMATICS:	
MATH181 Calculus I [Prerequisite \geq C in MATH 127 or 128 or placement in MATH 181]	4 credits
MATH 182 Calculus II <i>recommended but not required</i>	optional
STATISTICS:	
Either STA 391 Appl Stats for Biol Sci OR STA 491 Stats for Sci I	3 credits
PHYSICS:	
PHYS151/151L General Physics I [Prerequisite \geq C in MATH 127 or 128]	4 credits
PHYS152/152L General Physics II	4 credits