

BACHELOR OF SCIENCE (B.S.) DEGREE IN BIOCHEMISTRY

A total of 124 units must be completed with at least a 2.0 grade point average in all college work attempted, all units attempted at CSUN and all upper division units in the major. **Students interested in physical biochemistry should be in the BS Chemistry program. This program will provide additional math, physics and physical chemistry topics essential for physical biochemistry.**

SUGGESTED FOUR YEAR SEQUENCE FOR BIOCHEMISTRY B.S. MAJORS

Fall Semester	Units	Spring Semester	Units
FRESHMAN YEAR			
Chem 101 & 101L (General Chemistry)	5	Chem 102 & 102L (General Chemistry)	5
Biol 106 & 106L (Biological Principles I)	4	Biol 107 & 107L (Biological Principles II)	4
Math 255A (Calculus I)	3	Math 255B (Calculus II)	3
General Education ¹	3	General Education ¹	3
	15		15
SOPHOMORE YEAR			
Chem 321 & 321L (Chemical Analysis I)	4	Chem 334 & 334L (Prin. of Organic Chemistry II)	4
Chem 333 & 333L (Prin. Organic Chemistry I)	4	Phys 100B & BL (General Physics II)	4
Phys 100A & AL (General Physics I)	4	Biol 380 (Cell Biology)	3
General Education ¹	4	General Education ¹	4
	16		15
JUNIOR YEAR			
Chem 461 (Biochemistry I)	4	Chem 462 (Biochemistry II)	4
Chem 355 (Fund. of Physical Chemistry) (Fall Only)	3	Chem 322 & 322L (Chemical Analysis II)	4
Chem 355L (Exp. Physical Chemistry) (Fall Only)	1	General Education ¹	9
General Education ¹	9		
	17		17
SENIOR YEAR			
Chem 465 (Topics in Biochemistry)	3	Biol Elective (300-400 level)	4
Biol Elective (300-400 level)	3	Chem 401 (Inorganic Chemistry)	3
Chem Elective	3	General Education ¹	9
General Education ¹	8		
	17		16
¹ General Education units must include 6 units of American History and Institutions, etc. if CSUN work is used to satisfy Title V requirements. ² Students working toward a single subject major teaching credential should apportion their practice teaching between the Fall and Spring semesters.			

GENERAL EDUCATION REQUIREMENTS FOR B.S. BIOCHEMISTRY MAJORS

The following may be used as a guide and worksheet to select courses to satisfy G.E. requirements. Consult your advisor and the G.E. section of the CSUN catalog before selecting courses. Enter your courses selections in the spaces provided. Chemistry courses may not be used by chemistry majors to satisfy G.E. requirements. Science and Mathematics courses which do satisfy G.E. requirements for the Biochemistry B.S. program have been inserted in the appropriate spaces below.

Nine (9) units of G.E. requirements must be upper division selected from two different sections (A through F). Title V requirements (6 units) must be satisfied in addition to these requirements.

SECTION A: BASIC SUBJECTS (12 units / 3 units minimum from each subsection)	
A-1	
A-2	
A-3	Math 255A
A-4	
SECTION D: SOCIAL SCIENCES (9 units)	
9 units from	
at least 2	
disciplines	

SECTION B: NATURAL SCIENCE (9 units)	
B-1	Physics 100A
B-2	
SECTION E: APPLIED ARTS AND SCIENCES (4 units)	
4 units from	
at least 2	
disciplines	

SECTION C: HUMANITIES (9 units / 3 units minimum from each subsection)	
C-1	
C-2	
C-3	
SECTION F: COMPARATIVE CULTURAL STUDIES (9 units / 3 units minimum from each subsection)	
F-1	
F-2	
F-3	