

## BIOCHEMISTRY B.S.

All students must meet the Degree and University Requirements.

All students must meet the Catamount Core Curriculum Requirements.

All students must meet the College Requirements.

### MAJOR REQUIREMENTS

In addition to the CALS or CAS college distribution requirements, the biochemistry core requires satisfactory completion of:

Requirement Description	Credits	
<b>ANCILLARY REQUIREMENTS. At least 27 credits.</b>		
INTRODUCTORY BIOLOGY. Choose 1 of the following options:	8	
Option A:		
BCOR 1400 & BCOR 1450	Exploring Biology 1 and Exploring Biology 2	
Option B:		
BIOL 1000 & BIOL 1005	AP Biology 1 and AP Biology 2	
Option C:		
BIOL 1000 & BCOR 1425	AP Biology 1 and Accelerated Biology	
MATH 1234 & MATH 1248	Calculus I and Calculus II	8
PHYS 1600	Fundamentals of Physics I	4
PHYS 1650	Fundamentals of Physics II	4
STAT 1410	Basic Statistical Methods 1	3
<b>CORE REQUIREMENTS. At least 32 credits.</b>		
BCOR 2300	Genetics	3
BCOR 2500	Molecular & Cell Biology w/lab	4
CHEM 1410 & CHEM 1460 & CHEM 2400	Exploring Chemistry 1 and Exploring Chemistry 2 and Inorganic Chemistry	5
CHEM 1500	Organic Chemistry for Majors 1	4
CHEM 1550	Organic Chemistry for Majors 2	4
CHEM 2600	Physical Chem for Life Science	3
BIOC 3005	Biochemistry I	3
BIOC 3006	Biochemistry II	3
BIOC 3007	Biochemistry Lab	3
<b>ADVANCED COURSES. 13-16 credits.</b>		

In addition, students must select one course from the following group of intermediate-level laboratory electives:		4
BIOC 3030	Adv Biochem Lab: Protein CURE	
BIOL 4630	Adv Genetics Laboratory	
BIOL 4635	Adv Genetics & Proteomics Lab	
CHEM 2310	Quantitative Analysis	
MMG 2040	Intro Molecular Genetics	
MMG 3010	Applied Cell & Mol Bio Lab	
9-12 credits of advanced biochemistry-related electives		9-12
Undergraduate Elective Courses: ASCI 3180, BIOC 3063, BIOC 3075, BIOL 3500, BIOL 3505, BIOL 3560, BIOL 3565, BIOL 4135, BIOL 4405, CHEM 3320, CHEM 3400, CHEM 3600, CHEM 4580, MMG 3110, MMG 3230, MMG 3250, MMG 3300, MMG 3310, MMG 3320, MMG 3330, NFS 3243, NSCI 3250, PHRM 3010, PHRM 3720, PHRM 3900, PSYS 3250, STAT 3210		
Choose one of the following:		1-6
BIOC 4084	Biochemistry Senior Seminar	
BIOC 4996	Honors	
Students may substitute: (However, the program of study recommended above will provide a better preparation for advanced course work in biochemistry.)		
BIOL 1400 & BIOL 1450	Principles of Biology 1 and Principles of Biology 2 (For BCOR 1400 and BCOR 1450)	
BCOR 1425	Accelerated Biology (See Advisor)	
MATH 1212 & MATH 1242	Fundamentals of Calculus I and Transitional Calculus (For MATH 1234 and MATH 1248)	
PHYS 1400 & PHYS 1450 & PHYS 1410 & PHYS 1460 (For PHYS 1600 & PHYS 1650)		
CHEM 1400 & CHEM 1450 & CHEM 2580 & CHEM 2585 (For CHEM 1500 & CHEM 1550 & CHEM 1410 & CHEM 1460, CHEM 2400)		
Research up to 6 credits from the following: BIOC 3995, MMG 3995, CHEM 3995		
Research credits in other related disciplines may be applied with the approval of the biochemistry directors		
Other advisor approved science courses listed at the 3000 or 5000 level		
<b>Total Credits</b>		<b>73-81</b>

### RESTRICTIONS

Ineligible Minors: Biochemistry