

BIOLOGICAL SCIENCE B.S.

All students must meet the University Requirements.

All students must meet the Catamount Core Curriculum Requirements.

All students must meet the College Requirements.

MAJOR REQUIREMENTS

Students who are pursuing the B.S. in Biological Science in the College of Arts and Sciences are required to take at least 84 credits of coursework in the College of Arts and Sciences.

At least 41 credits in major courses, plus 33-35 credits in ancillary courses, including:

Requirement Description	Credits	
CORE REQUIREMENTS. At least 15 credits.		
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	
Option D:		
BIOL 1400 & BIOL 1450	Principles of Biology 1 and Principles of Biology 2	
BCOR 2100	Ecology and Evolution	4
BCOR 2300	Genetics	3
BCOR 2500	Molecular & Cell Biology w/lab	4
ANCILLARY REQUIREMENTS. At least 33 credits.		
CHEM 1400	General Chemistry 1	4
CHEM 1450	General Chemistry 2	4
CHEM 2580	Organic Chemistry 1	4
CHEM 2585	Organic Chemistry 2	4
CALCULUS I. Choose 1 of the following:	3-4	
MATH 1212	Fundamentals of Calculus I	
MATH 1234	Calculus I	
CALCULUS II. Choose 1 of the following:	3-4	

MATH 1224	Fundamentals of Calculus II	
MATH 1242	Transitional Calculus	
MATH 1248	Calculus II	
STATISTICS. Choose 1 of the following:		3
STAT 1410	Basic Statistical Methods I	
STAT 2430	Statistics for Engineering	
PHYSICS. Choose 1 of the following options:		8
Option A:		
PHYS 1400 & PHYS 1450	Elementary Physics I and Elementary Physics II	
Option B:		
PHYS 1600 & PHYS 1650	Fundamentals of Physics I and Fundamentals of Physics II	
ELECTIVES. 26 credits.		
Students should meet with an academic advisor during their second year to map a plan of study for completing their Advanced Electives.		
CATEGORY A (courses at the 3000-level or above): 8-26 additional credits from the following:		8-26
BIOL numbered 3000 to 3990, or 4000 to 4990		
PBIO numbered 3000 to 3990, or 4000 to 4990		
MMG numbered 3000 to 3990, or 4000 to 4990		
ALE 3120, ALE 3320, ALE 3680, ASCI 3040, ASCI 3080, ASCI 3150, ASCI 3180, ASCI 3200, ASCI 3600, BCOR 3990, BCOR 4990, BHSC 3420, BHSC 3440, BHSC 3810, BHSC 3820, BIOC 3001, BIOC 3003, BIOC 3005, BIOC 3006, BIOC 3007, BIOC 3030, BIOC 3063, BIOC 3075, BIOC 3991, BME 3340, CSD 3810, ENSC 4010, FOR 3230, FOR 3350, GEOG 3250, MLS 3200, MLS 3300, NFS 3203, NFS 3204, NFS 3243, NFS 3254, NR 4680, NSCI 3220, NSCI 3230, NSCI 3250, NSCI 3500, NSCI 4500, PHRM 3000, PHRM 3010, PHRM 3720, PHRM 3900, PSYS 3200, PSYS 3202, PSYS 3205, PSYS 3210, PSYS 3250, SEP 4200, SEP 4280, SEP 4500, SEP 4800, STAT 3000, WFB 3240, WFB 3610, WFB 4320, WFB 4610, WFB 4750, WFB 4830		
CATEGORY B (courses at the 2000-level): Up to 8 additional credits from the following:		0-8
BIOL numbered 2000 to 2990		
PBIO numbered 2000 to 2990		
MMG numbered 2000 to 2990		

ALE 2060, ALE 2120, ALE 2170, ALE 2380, ALE 2430, ALE 2540, ALE 2560, ASCI 2110, ASCI 2120, ASCI 2180, ASCI 2600, ASCI 2700, ENSC 2480, ENSC 2490, FOR 2570, GEOG 2250, MMG 2010, MMG 2040, MMG 2060, MMG 2993, MMG 2994, NFS 2114, NFS 2143, NFS 2153, NFS 2163, NFS 2195, NFS 2196, NSCI 2100, NSCI 2105, PATH 2010, PBIO 2040, PBIO 2080, PBIO 2090, PBIO 2170, PBIO 2330, PBIO 2770, PBIO 2993, PSYS 2200, WFB 2300, WFB 2310, WFB 2410, WFB 2740, WFB 2990	
CATEGORY C (research and other experiences): Up to 10 additional credits, distributed as follows:	0-10
Advanced Undergraduate Research. Up to 3 additional credits from the following, in any combination: ALE 3995, ASCI 3995, BCOR 3995, BHSC 3995, BIOC 3995, BIOL 3995, BIOL 4996, FOR 3995, MMG 3995, NSCI 3995, PBIO 3995, PBIO 4996, PHRM 3995, WFB 3995, or, with the approval of a major advisor, from another biological discipline	
Undergraduate Research: Up to 3 additional credits from the following, in any combination: ALE 2995, ASCI 2995, BCOR 2995, BHSC 2995, BIOC 2995, BIOL 2995, FOR 2995, MMG 2995, NSCI 2995, PBIO 2995, PHRM 2995, PSYS 2995, WFB 2995, ALE 3995, ASCI 3995, BCOR 3995, BHSC 3995, BIOC 3995, BIOL 3995, BIOL 4996, FOR 3995, MMG 3995, NSCI 3995, PBIO 3995, PBIO 4996, PHRM 3995, WFB 3995, or, with the approval of a major advisor, from another biological discipline	
Biology in Practice. Up to 2 additional credits of BCOR 3000	
Teaching Assistantship. Up to 2 additional credits from the following, in any combination: ALE 2994, ALE 3994, ASCI 2994, ASCI 3994, BCOR 4994, BHSC 2994, BHSC 3994, BIOC 2994, BIOC 3994, BIOL 4994, FOR 2994, FOR 3994, MMG 2994, MMG 3994, NSCI 4994, PBIO 2994, PBIO 3994, PHRM 2994, PHRM 3994, PSYS 3994, WFB 2994, WFB 3994, or, with the approval of a major advisor, from another biological discipline	
NOTES	
Additional courses, including Special Topics and graduate-level courses, may be accepted as electives with prior approval from a Biological Sciences advisor. Graduate courses are often open to upper-level undergraduate students with instructor permission.	

Courses for the major and/or its pre/co-requisites that are cross-listed in the catalog or schedule of courses under another course prefix may be taken under that other prefix and still count for these requirements.

With the approval of the chair/director, courses that applied to the major in previous years but have since been deactivated may be applied to this year's major requirements if they are reactivated.

For a Bachelor of Science degree, no more than 50 credits in courses with the same departmental prefix may be used toward completion of the 120 credits required for graduation.

At least half of the credits used to complete major requirements must be taken at the University of Vermont.

RESTRICTIONS

Students completing the B.S. in Biological Science in the College of Arts & Sciences may not also receive the B.A. in Biology, the B.A. or B.S. in Neuroscience, the B.A. or B.S. in Zoology, or the B.S. in Biological Science in the College of Agriculture & Life Sciences.

PRE/CO-REQUISITES

Introductory and intermediate courses for various subject areas may be necessary to reach some of the courses that can be applied to the major as Advanced Electives.

OTHER INFORMATION

In the College of Arts and Sciences (CAS), only one course may overlap between a major and a minor or between two CAS majors.