MARYVILLE UNIVERSITY

BIOLOGY

Minimum of **120** credit hours required for a Bachelor of Science degree.
Last **30** credit hours must be from Maryville University

NAME: _____ **REVIEWER:** _____ **DATE:** _____

I. MCORE (36 Hours)	Credits	SEM/YR	Grade	Notes
A. Social Discovery (6)				
CORE 101: Discovering Community	3			
Student Choice	3			
CORE 401: Senior Capstone				In Major: BIOL 401 or BIOL 480 or BIOL 495 or BIOL 499
B. Civic Discovery (6)				
CORE 201: Discovering the Nation	3			
Student Choice	3			
C. Cultural Discovery (6)				
CORE 301: Discovering the World	3			
Student Choice	3			
D. Creative Discovery (9)				
COMP 104: Writing Across the Disciplines II	3			
Student Choice	3			
Student Choice	3			
F. Scientific Discovery (9)				
CORE 102: Everyday Data	3			
Student Choice	3			
Student Choice	3			
II. Major Requirements (58Hours)	**Credits**	**SEM/YR**	**Grade**	**Notes**
A. Other (34 cr)				
COMP 101 Writing Across the Disciplines I	3			
CHEM 103 General Chemistry I	4			
CHEM 104 General Chemistry II	4			
MATH 151 (4) or MATH 125 (3)	4			
MATH 141 or SOSC 341 or BIOL 280	3			
CHEM 203 Organic Chemistry I	4			
CHEM 204 Organic Chemistry II	4			
PHYS 153 (recommended) or PHYS 103	4			
PHYS 154(recommended) or PHYS 104	4			
B. Biology Core (24 cr)				
BIOL111 Research Methods I	1			
BIOL 117 General Biology I	4			
BIOL 118 General Biology II	4			
BIOL 215 Microbiology	4			
BIOL 351 Cell Biology	4			
BIOL 260 General Genetics	4			
BIOL 401 or BIOL 480 or BIOL 495 OR BIOL 499	3			36 credits if student selects BIOL 499
C. Specialized Courses (17-20 cr)				
In addition to the core, students must take FIVE courses from the two upper division columns. At least one course from each column. TWO courses must be 4 credit courses with labs. Low credit hour count from all possible combinations (17) High credit hour count from all possible combinations (20)				
Degree Total	**120**			

Revised: June 30, 2025

SAMPLE COURSE PLAN with a Chemistry Minor included

This is an example of the sequence of course work to complete this major.

Fall of Freshman Year	Credits	Spring of Freshman Year	Credits
CORE 101: Discovering Community	3	CORE 201: Discovering the Nation	3
COMP 101 Writing Across the Disciplines I	3	COMP 104: Writing Across the Disciplines II	3
BIOL 117 General Biology I	4	BIOL 118 General Biology II	4
BIOL111 Research Methods I	1	MATH 125 (3) or MATH 151 (4)	3/4
CHEM 103 General Chemistry I	4	CHEM 104 General Chemistry II	4
Total	**15**	**Total**	**17/18**
Fall of Sophomore Year	**Credits**	**Spring of Sophomore Year**	**Credits**
CORE 301: Discovering the World	3	BIOL 215 Microbiology or BIOL 260 Genetics	4
BIOL 215 Microbiology or BIOL 260 - Genetics	4	MATH 141 or SOSC 341 or BIOL 280	3
CHEM 203 Organic Chemistry I	4	CHEM 204 Organic Chemistry II	4
CORE 102: Everyday Data	3	MCORE – Student Choice	3
Total	**14**	**Total**	**14**
Fall of Junior Year	**Credits**	**Spring of Junior Year**	**Credits**
BIOL 351 – Cell Biology	4	Specialized Science: BIOL 354 or some other upper division Biology selection	3
Specialized Science: CHEM 320 (can be used toward a CHEM minor)	4	Specialized Science: CHEM 321 (can be used toward a CHEM minor)	3
PHYS 153 (recommended) or PHYS 103	4	PHYS 154 (recommended) or PHYS 104	4
MCORE – Student Choice	3	Specialized Science: BIOL 370 or some other upper division Biology selection	4
		MCORE – Student Choice	3
Total	**15**	**Total**	**17**
Fall of Senior Year	**Credits**	**Spring of Senior Year**	**Credits**
MCORE – Student Choice	3	CORE 401: BIOL 401 or BIOL 480 or BIOL 495	3
Specialized Science: BIOL 394 Advanced Physiology or some other upper division Biology selection	3	MCORE – Student Choice	3
Specialized Science: BIOL 390 or some other upper division Biology selection	4	Specialized Science: BIOL 425 or some other upper division Biology selection	3
MCORE – Student Choice	3	MCORE – Student Choice	3
Elective	3		
Total	**16**	**Total**	**12**

Specialized Course Selections	
Ecology/Evolutionary Biology	**MOLEC & MICROBIOL & CELL Biology**
BIOL 303 Comparative Vertebrate. Anatomy hybrid lecture and lab (3) S	BIOL 350 Intro to Gross Anatomy w/Lab (4) S
BIOL 304 Zoology (3) F	BIOL 354 Immunology (3) S
BIOL 314 Botany w/Lab(4) F	BIOL 390 Biotechnology (3) + 390L (1) F/S
BIOL 331 Conservation Biology (3) F	BIOL 394 Advanced Physiology (3) F
BIOL 352 General Ecology w/Lab (4) F	BIOL 395 Pathophysiology (3) S
BIOL 370 Evolution w/Lab (4) S	BIOL 410 Histology hybrid lecture and lab (3) S
BIOL 381 Ornithology hybrid lecture and lab (3) S	BIOL 416 Microbial Genetics w/Lab req (4) F
BIOL 310 Climate Science (proposed) (3)	BIOL 418 Applied Microbiology w/Lab req (4) S
	BIOL 425 Molecular Biology hybrid lecture and lab (3) S
Additional upper division transfer courses may count towards the columns at the discretion of the Program Director.	
Study Abroad Courses that are approved by the program can be applied to the required upper division courses.	

Revised: June 30, 2025