MARYVILLE UNIVERSITY

BIOCHEMISTRY

Minimum of **120** credit hours required for a Bachelor of Arts 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: CHEM 401, 498, 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 (84 Hours)	**Credits**	**SEM/YR**	**Grade**	**Notes**
COMP 101 Writing Across the Disciplines I	3			
MATH 151 Calculus I	4			
MATH 152 Calculus II	4			
PHYS 153 Calculus-Based Physics I	4			
PHYS 154 Calculus-Based Physics II	4			
Elective	4			
Elective	3			
Elective	3			
Chemistry Courses				
CHEM 103 General Chemistry I	4			
CHEM 104 General Chemistry II	4			
CHEM 203 Organic Chemistry I	4			
CHEM 204 Organic Chemistry II	4			
CHEM 320 Biochemistry	4			
CHEM 321 Biochemistry II	3			
CHEM 431	3			
Two from: CHEM 301, 353, 410, or 432	6			
CHEM 401, 498, or 499	3			Capstone
Biology Courses				
BIOL 117 General Biology I	4			
BIOL 118 General Biology II	4			
BIOL 260 General Genetics	4			
BIOL 351 Cell Biology	4			
BIOL 316 or 390	4			
Degree Total	**120**			

Revised: June 30, 2025

SAMPLE COURSE PLAN

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

ODD YEAR FALL			
Fall of Freshman Year (Odd)	**Credits**	**Spring of Freshman Year (Even)**	**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
CHEM 103 General Chemistry I	4	CHEM 104 General Chemistry II	4
BIOL 117 General Biology I	4	BIOL 118 General Biology II	4
MATH1 Calculus I	4	MATH2 Calculus II	4
Total	**18**	**Total**	**18**
Fall of Sophomore Year (Even)	**Credits**	**Spring of Sophomore Year (Odd)**	**Credits**
CORE 301: Discovering the World	3	CORE 102: Everyday Data	3
CHEM 203 Organic Chemistry I	4	CHEM 204 Organic Chemistry II	4
PHYS3 Calculus-Based Physics I	4	PHYS4 Calculus-Based Physics II	4
BIOL 260 General Genetics	4	Elective	3
Total	**15**	**Total**	**14**
Fall of Junior Year (Odd)	**Credits**	**Spring of Junior Year (Even)**	**Credits**
CHEM 320 Biochemistry	4	CHEM 321 Biochemistry II	3
CHEM 431	3	Chemistry Elective / Elective	**3**
BIOL 316 or 390	4	BIOL 351 Cell Biology	4
MCORE – Student Choice	3	MCORE – Student Choice	3
		MCORE – Student Choice	3
Total	**14**	**Total**	**16**
Fall of Senior Year (Even)	**Credits**	**Spring of Senior Year (Odd)**	**Credits**
MCORE – Student Choice	3	CORE 401: CHEM 401, 498, 499	3
MCORE – Student Choice	3	MCORE – Student Choice	3
Chemistry Elective / Elective	3	MCORE – Student Choice	3
Chemistry Elective	3 or 4	Chemistry Elective / Elective	4
Total	**12/13**	**Total**	**13**

EVEN YEAR FALL			
Fall of Freshman Year (Even)	**Credits**	**Spring of Freshman Year (Odd)**	**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
CHEM 103 General Chemistry I	4	CHEM 104 General Chemistry II	4
BIOL 117 General Biology I	4	BIOL 118 General Biology II	4
MATH1 Calculus I	4	MATH2 Calculus II	4
Total	**18**	**Total**	**18**
Fall of Sophomore Year (Odd)	**Credits**	**Spring of Sophomore Year (Even)**	**Credits**
CORE 301: Discovering the World	3	CORE 102: Everyday Data	3
CHEM 203 Organic Chemistry I	4	CHEM 204 Organic Chemistry II	4
PHYS3 Calculus-Based Physics I	4	PHYS4 Calculus-Based Physics II	4
BIOL 260 General Genetics	4	Elective	3
Total	**15**	**Total**	**14**
Fall of Junior Year (Even)	**Credits**	**Spring of Junior Year (Odd)**	**Credits**
CHEM 320 Biochemistry	4	CHEM 321 Biochemistry II	3
Chemistry Elective	3 or 4	Chemistry Elective / Elective	3
BIOL 316 or 390	4	BIOL 351 Cell Biology	4
MCORE – Student Choice	3	MCORE – Student Choice	3
		MCORE – Student Choice	3
Total	**14/15**	**Total**	**16**
Fall of Senior Year (Odd)	**Credits**	**Spring of Senior Year (Even)**	**Credits**
MCORE – Student Choice	3	CORE 401: CHEM 401, 498, 499	3
MCORE – Student Choice	3	MCORE – Student Choice	3
Chemistry Elective / Elective	3	MCORE – Student Choice	3
CHEM 431	3	Chemistry Elective / Elective	4
Total	**12**	**Total**	**13**

Two from: CHEM 301, 353, 410, or 432. Student choice Chemistry Courses: CHEM 301 – Offered Fall Even Year, CHEM 353 – Offered Every Fall, CHEM 410 – Offered Spring Odd Year (CHEM 353 Required), CHEM 432 – Offered Spring Even Year

Revised: June 30, 2025