

The **Biomedical Sciences** Program:

Biomedical Sciences differs from the overall biology curriculum in the following ways:

The capstone senior experience is different:

Biomedical Sciences has its own Capstone taken in the senior year:

- BIOL B4441/B441L— Biochemistry and lab (3/1 credits), req. **Capstone** Every Fall

We recommend a summer internship relevant to the field, which can be science or policy based:

The summer internship is critical to having the practical experience to 1) landing a good job, 2) getting into a research program (job or medical/graduate school), or 3) working with State or Federal agencies on graduation from USCB.

For upper level electives, you can choose as you please, but we recommend the following:

BIOL B399— Independent Research (related to Biomedical Sciences) (variable up to 3/course) different times based on student interest and faculty availability

BIOL B405/405L—Developmental Biology (and lab) 3(1) Spring Odd

BIOL B430—Histology and Lab (3/1) Spring Even

BIOL B431/B431 L—Bacteriology and Lab (3/1) Spring Even

BIOL B435— Neurobiology (+lab) (4) Fall Odd

BIOL B460/B460L – General Physiology and Lab (3/1) Every Spring

BIOL B498 - Biological Research: An Introduction (4) Every Fall

BIOL B499— Special Topics (related to Biomedical Sciences) (variable up to 3/course) different times based on student interest and faculty availability

The following is a suggested program of schedule for a 4-year completion of the **Biomedical Sciences** program. You do not have to take these courses in this precise order, but the more you vary from this prescribe curriculum—the more likely a conflict in scheduling might make things more difficult for your timely completion of your degree.

Curriculum by Year

Courses in Blue are Required for the Concentration (15 Credit Hours)

Course Name	Credits	Course Name	Credits	Course Name	Credits
Year 1					
Fall		Spring		Summer	
ENGL B101 English Composition	3	ENGL B102 Engl. Comp & Lit	3		
MATH B111 or B115 Algebra or Precalculus	3(4)	MATH B115 or B141 Precalculus or Calculus I*	4		
BIOL B101 Biological Principles I	4	BIOL B102 Biol. Principles II	4		
PSYC B101 Psychology	3	CHEM B111 Gen. Chemistry I	4		
BIOL B290 Biology or B100 Honors Seminar	1				
Total Semester Hours	14 +	Total Semester Hours	15		
Year 2					
Fall		Spring		Summer	
BIOL B301 Ecology & Evolution (w/Lab) or BIOL B303 Fundamental Genetics	4 3	BIOL B302/302L Cell & Molecular Biology with Lab.	4	Internship	
CHEM B112 General Chemistry II	4	CHEM B333 Organic Chemistry I (w/Lab)	3		
MATH B141 or B142 Calculus I or II*	4	CHEM B331L Organic Chem. I Lab	1		
GE/Elective or Foreign Language	3	MATH B142 Calculus II* or GE/Elective	4(3)		
		Foreign Language	3		
Total Semester Hours	17	Total Semester Hours	14+	Hours	0
Year 3					
Fall		Spring		Summer	
BIOL B301 Ecology & Evolution (w/Lab) or BIOL B303 Fundamental Genetics	4 3	BIOL B399+ BioMed Biology Elective (w/ Lab)	3(4)	Internship	
CHEM B334 Organic Chem. II	3	BIOL B399+ BioMed Biology Elective (w/ Lab)	3(4)		
CHEM B332L Organic Chem. II Lab	1	STAT B201 Elementary Stats	3		
PHYS B2X1† Physics I	3	GE/Elective	3		
PHYS B2X1L† Physics I Lab	1	GE/Elective	3		
GE/Electives	6				
Total Semester Hours	14+	Total Semester Hours	14+	Hours	
Year 4					
Fall		Spring		Summer	
BIOL 441 Biochemistry (req'd) and	3	BIOL B399+ BioMed Biology Elective (w/ Lab)	3(4)		
BIOL 441 Biochemistry Lab (req'd)	1	BIOL B399+ BioMed Biology Elective (w/ Lab)	3(4)		
BIOL B399+ BioMed Biology Elective (w/ Lab)	3(4)	BIOL B399+ BioMed Biology Elective (w/ Lab)	3(4)		
GE/Elective	3	GE/Elective	3		
GE/Elective	3	GE/Elective	3		
GE/Elective	3				
Total Semester Hours	16+	Total Semester Hours	13+	Hours	

*Math requirements to satisfy degree; either: MATH B141/B142, MATH B141/B170, MATH B141/B172, MATH B122/B170, or MATH B122/B172

† Either PHYS B201/201L and B202/202L **OR** PHYS B211/211L and B212/212L are acceptable.