

BACHELOR OF SCIENCE IN BIOLOGICAL SCIENCES BACCMED TRACK

The BS in Biological Sciences - BaccMed Track degree is competitive program recommended for those who wish to pursue careers in medicine.

Learning Outcomes

The student learning outcomes for the major in Biological Sciences are as follows:

- Students will be prepared for entry into professional health or research related schools, post-graduate (MS) programs, or the workplace.
- Students will master the subjects found on standardized tests (molecular biology, physiology, immunology) required for entrance into professional schools (MCAT, GRE, etc.).
- Students will demonstrate an understanding of fundamental biological principles and their application.
- Students should be able to reason critically, both individually and in collaboration with other students.

The BS degree in Biological Sciences requires a minimum of 37 semester hours from within the Department of Biological Sciences. (Courses at the 1000-level are not applicable to a BS degree.) Required courses may not be taken as credit/no credit.

All Biological Science majors following the BaccMed track must satisfy the following requirements:

COURSE	TITLE	S.H.
FIRST YEAR REQUIREMENT -STUDENT SUCCESS		
YSU 1500	Success Seminar	1-2
or SS 1500	Strong Start Success Seminar	
or HONR 1500	Intro to Honors	
General Education Requirements		
ENGL 1550	Writing 1	3
ENGL 1551	Writing 2	3
CMST 1545	Communication Foundations	3
MATH 1581H	Honors Biomathematics 2 (MATH 1571 is now an allowed prerequisite for MATH 1581H)	4
Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model.		
Listed GER courses below are required for this major.		
Arts and Humanities		6
Natural Science (2 courses, one must include a lab)		
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	
CHEM 1516 & 1516L	General Chemistry 2 and General Chemistry 2 Laboratory	
Social Science		
SOC 1500	Introduction to Sociology	
PSYC 1560	General Psychology	
Social and Personal Awareness		
PHLT 1531	Fundamentals of Public Health	
SOC 3745	Sociology of Health, Illness, and Healthcare	
Required BIOL Courses (21 s.h.):		
BIOL 2603	Integrated Biology for BS/MD	4
BIOL 3711	Cell Biology: Fine Structure	3

BIOL 3721	Genetics	3
BIOL 3730	Human Physiology	4
BIOL 3730L	Human Physiology Laboratory	1
BIOL 3705	Introduction to Human Gross Anatomy	4
BIOL 3705L	Introduction to Human Gross Anatomy Laboratory	0
BIOL 4861	Senior Biology Capstone Experience	2

In addition to the 21 s.h. Required BIOL Courses, students must take a minimum of 16 s.h. elective BIOL courses. These must be 3700 level or higher. A minimum of two BIOL electives must have a laboratory component. One of these labs must be at 4800 level or above.

Required Support Courses (54 s.h.):		
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4
CHEM 1516 & 1516L	General Chemistry 2 and General Chemistry 2 Laboratory	4
CHEM 3719 & 3719L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 3720 & 3720L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
CHEM 3785	Biochemistry 1	3
PHYS 2610	General Physics 1	4
PHYS 2610L	General Physics Laboratory 1	1
PHYS 2611	General Physics 2	4
PHYS 2611L	General Physics laboratory 2	1
MATH 1572	Calculus 2	4
STAT 3717	Statistical Methods (or Biol 5853, Biometry, 4 sh)	4
SOC 1500	Introduction to Sociology	3
SOC 3745	Sociology of Health, Illness, and Healthcare	3
PSYC 1560	General Psychology	3
PHLT 1531	Fundamentals of Public Health	3
PHLT 3709	Elements of Urban Environmental Health Practices	3
STEM 4809	Primary Care Medical Practices	2
Free Electives	Additional coursework as needed to reach 120 s.h.	9
Total Semester Hours		120-121