BACHELOR OF SCIENCE IN BIOCHEMISTRY - GENERAL

Code	Title	Credit Hours
Wellness		
APPH 1040	Scientific Foundations of Health	2
or APPH 10	The Science of Physical Activity and Health	
or APPH 10	Flourishing: Strategies for Well-being and Resilience	
Core A - Essential Skills		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
MATH 1552	Integral Calculus	4
Core B - Institutional Options		
CS 1301	Introduction to Computing	3
or CS 1315	Introduction to Media Computation	
or CS 1371	Computing for Engineers	
Core C - Humanities		
Any HUM		6
Core D - Science, Math, & Technology		
PHYS 2211	Introductory Physics I	4
PHYS 2212	Introductory Physics II	4
MATH 1551	Differential Calculus	2
MATH 1553	Introduction to Linear Algebra [3]	2
Core E - Social Sciences		
Select one of the following:		3
HIST 2111	The United States to 1877	
HIST 2112	The United States since 1877	
INTA 1200	American Government in Comparative Perspective	
POL 1101	Government of the United States	
PUBP 3000	American Constitutional Issues	
Any SS		9
Core F - Courses Related to Major		
CHEM 1211K	Chemical Principles I	4
CHEM 1212K	Chemical Principles II	4
CHEM 2380	Synthesis Laboratory I	2
MATH 2551	Multivariable Calculus	4
BIOS 1107 & 1107L	Biological Principles and Biological Principles Laboratory	4
Major Requirements		
CHEM 2216 & 2216L	Quantitative Chemical Analysis and Quantitative Chemical Analysis Laboratory	4
or CHEM 2214	Quantitative Chemical Analysis	
CHEM 2311	Organic Chemistry I	3
CHEM 2312	Organic Chemistry II	3
or CHEM 2313	Organic and Bioorganic Chemistry	
CHEM 3216 & 3216L	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
or CHEM 32	Analytical Chemistry	
CHEM 3371	Organic Chemistry Laboratory	2
CHEM 3411	Physical Chemistry I	3
CHEM 4511	Biochemistry I	3
or CHEM 3521	Biochemistry I	
CHEM 4512	Biochemistry II	3
or CHEM 35	Biochemistry II	
CHEM 4521	Biophysical Chemistry	3
CHEM 4581	Biochemistry Laboratory I	3
CHEM 4582	Biochemistry Laboratory II	3
CHEM 4601	Chemistry Seminar	2
Biology Electives [2]		
BIOS 2600	Genetics	3
BIOS 3450	Cell and Molecular Biology	3
Select one of the following:		3
BIOS 3380	Microbiology	
BIOS 3450	Cell and Molecular Biology	
BIOS 4015	Cancer Biology and Biotechnology	
BIOS 4340	Medical Microbiology	
BIOS 4401	Experimental Design and Statistical Methods in Biological Sciences	
BIOS 4418	Microbial Physiology	
BIOS 4464	Developmental Biology	
BIOS 4570	Immunology	
BIOS 4607	Molecular Biology of Microbes: Disease, Nature, and Biotechnology	
BIOS 4668	Eukaryotic Molecular Genetics	
CHEM 4765	Drug Design, Development, and Delivery	
Free Electives		
Free Electives [1,2,4]		13
Total Credit Hours		**122**

[1] VIP courses may be used only as free electives.
[2] Courses may be applied toward completion of a minor.
[3] MATH 1554 or MATH 1564 may be used in place of MATH 1553.
[4] A maximum of twelve credit hours of CHEM 4699 taken on a letter-grade basis are permitted for the degree program. Up to six hours of CHEM 2699 taken on a letter-grade basis may be used as free electives