

Biochemistry (B.A.) / Doctor of Pharmacy (PharmD)
University of the Sciences in Philadelphia
 (Department of Chemistry and Biochemistry)

Major Requirements

<u>Major Courses</u>	<u>Credits</u>	<u>Semester Completed</u>
[CHEM 105] General Chemistry I	4	
[CHEM 106] General Chemistry II	4	
[CHEM 309] Organic Chemistry I	4	
[CHEM 310] Organic Chemistry II	4	
[CHEM 410] Biochemistry I	4	
[CHEM 412] Biochemistry II	4	
[CHEM 221] Chemical Analysis I	4	
[CHEM 390] Junior Chemistry Seminar	1	
[CHEM 490] Senior Chemistry Seminar	1	
[CHEM 495] Capstone: Natural Sciences	3	
[BIOL 160] Molecular and Cellular Biology	4	
[BIOL 161] Animal Form and Function	3	
[BIOL 382] Microbiology for Health Professions	4	
[BIOL 386] Human Anatomy	4	
<i>One of the following:</i>	3	
[PHIL 101] Problems in Philosophy (3)		
[PHIL 102] History of Philosophy (3)		
[MATH 111] Calculus I	4	
<i>One of the following:</i>	8	
[PHYS 201] and [PHYS 202] Introductory Physics I and II		
[PHYS 211] and [PHYS 212] General Physics I and II		
[SOAN 101] Introduction to Sociology	3	
<u>University of the Sciences in Philadelphia Course Requirements (4 years)</u>		
[PC 411] Principles of Medicinal Chem. and Molecular Pharm.	4	
[ST 310] Introduction to Biostatistics	3	

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General Education Requirements

<u>Courses</u>	<u>Credits</u>	<u>Semester Completed</u>
First Year Seminar	3	
Oral Communications ([CO 101] - USP)	3	
Created and Called for Community	3	
Mathematical Sciences ([MATH 111])	3 or 4	<u>met by major</u>
Laboratory Science ([BIOL 160] or [CHEM 105])	3 or 4	<u>met by major</u>
Science, Technology & the World	3	<u>waived</u>
Two of the following:	6	
Social Science (3 credits) ([SOAN 101])		<u>met by major</u>
European History (3 credits)		
United States History (3 credits)		
Literature	3	
Philosophy and Religion ([PHIL 101] or [PHIL 102])*	3	<u>met by major</u>
Arts	3	
Language/Cross Cultural		
First Semester of Language	3	
Second Semester of Language	3	
Third Semester of Language or Cross Cultural	3	
Non-Western Studies	2 or 3	
Bible	3	
Christian Beliefs	3	
Health and Physical Fitness		
Introduction to Wellness	2	
Activity Course	1	
One of the following:	3	
Ethics (3 credits)		
World Views (3 credits)		
Pluralism in Contemporary Society (3 credits)		
Writing Enriched Course		

SUMMARY OF DEGREE REQUIREMENTS

General Education	44-45
Major Requirements from Messiah	63
Major Requirements from Univ. of the Sciences	7
Free Electives from Messiah or the Univ. of the Sciences	8-9
Total	123

*Philosophy is not counted against the curricular parameters for the major.

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