

## Requirements for the Major in Chemistry with Pharmacy Concentration (Dual Degree)

Students participating in this program are expected to complete all Presbyterian College general education requirements. Students must also complete a capstone experience at the PC School of Pharmacy to be approved by the Department of Chemistry. Students entering the dual degree program should be aware of stipulations from the PC School of Pharmacy regarding admission to its program and completion of all prerequisites before admission to that program, i.e., pre-pharmacy course requirements must be completed with a grade of “C” or better, and a minimum cumulative GPA of 2.5 is required for admission to the program. After earning a minimum of 99 hours at PC, students enter the pharmacy program at the PC School of Pharmacy and in four years earn both a B.S. in Chemistry with Pre-Pharmacy Concentration and a Pharm.D. from the PC School of Pharmacy.

<b>1. CHEMISTRY CORE COURSES:</b>	<b>Grade</b>	<b>S.H.</b>	<b>Q.P.</b>	<b>Courses required for major</b>	<b>Grade</b>	<b>S.H.</b>	<b>Q.P.</b>
CHEM 101, 101L General Chemistry I		3,1		<b>5. PHARMACY AREA COURSES</b>			
*CHEM 102, 102L General Chemistry II		3,1		BIOL 3060 Microbiology		4	
CHEM 221, 221L Organic Chemistry I		3,1		BIOL 3110 Physiology		3	
CHEM 222, 222L Organic Chemistry II		3,1					
CHEM 311 Quantitative Analysis		4		<b>6. Select 1 course from the following:</b>			
CHEM 401, 401L Physical Chemistry I		3,1		ECON 201 Principles of Macroeconomics		3	
				ECON 202 Principles of Microeconomics		3	
<b>2. REQUIRED RELATED COURSES</b>							
BIOL 1150, 1150L Biological Concepts		3,1		<b>7. Select 1 course from the following:</b>			
BIOL 1151, 1151L Organismal Biology		3,1		MATH 210 Data Analysis & Stat Computing I		3	
MATH 202 Calculus II		3		STAT 320 Research Statistics		4	
PHYS 1500 General Physics I		4					
PHYS 1510 General Physics II		4		<b>8. Select 1 course from the following:</b>			
SPCH 201 Public Speaking		3		PSYC 201 Introduction to Psychology		3	
				SOC 201 Introduction to Sociology		3	
<b>3. Select 1 course from the following:</b>							
BCHE 307, 307L Biochemistry I		3,1		<b>9. Capstone Experience</b>			
BCHE/BIOL 3210 Molecular Biology		4		To be approved by Chemistry Department		1-3	
BCHE/CHEM 458 Special Topics		3-4					
BIOL 2340 Genetics		4					
BIOL 3350 Human Genetics		3		<b>To satisfy this major, the following courses must be completed once enrolled as a student at the PC School of Pharmacy:</b>			
CHEM 312 Instrumental Analysis		4		PHRM 5104 Human Biochemistry		3	
CHEM 322-322L Inorganic Chemistry		3,1		PHRM 5105 Practice Integrated Lab Seq I		1	
CHEM 332 Advanced Organic Chemistry		5		PHRM 5107 Pharmaceutical Calculations		2	
CHEM 342 Spectroscopy		4		PHRM 5208 Principles of Pharm/Med Chem I		2	
CHEM 345 Forensic Science		3		PHRM 6110 Princip of Pharm/Med Chem II		2	
CHEM 352 Chemistry and Art		4					
CHEM 402, 402L Physical Chemistry II		3,1					
				<b>*All students must complete the American Chemistry Society General Chemistry Exam with a grade of 60% or higher to receive credit for CHEM 102.</b>			
<b>4. Select 1 course from the following:</b>							
BIOL 3020 Comparative Anatomy		4					
BIOL 3030 Human Anatomy & Embryology		3		<b>Total Hours Required</b>		<b>79-85</b>	

## Requirements for the Major in Biology with Pharmacy Concentration (Dual Degree)

Students participating in this program are expected to complete all Presbyterian College general education requirements. Students must also complete a capstone experience at the PC School of Pharmacy to be approved by the Department of Biology. Students entering the dual degree program should be aware of stipulations from the PC School of Pharmacy regarding admission to its program and completion of all prerequisites before admission to that program, i.e., pre-pharmacy course requirements must be completed with a grade of “C” or better, and a minimum cumulative GPA of 2.5 is required for admission to the program. After earning a minimum of 90 hours at PC, students enter the pharmacy program at the PC School of Pharmacy and in four years earn both a B.S. in Biology with Pre-Pharmacy Concentration and a Pharm.D. from the PC School of Pharmacy.

<b>1. BIOLOGY CORE COURSES:</b>	<b>Grade</b>	<b>S.H.</b>	<b>Q.P.</b>	<b>Courses required for major</b>	<b>Grade</b>	<b>S.H.</b>	<b>Q.P.</b>
BIOL 1150, 1150L Biological Concepts		3,1		<b>5. Select 1 course from the following:</b>			
BIOL 1151, 1151L Organismal Biology		3,1		MATH 199 Applied Calculus		3	
BIOL 2002 Seminar in Biological Primary Lit I		1		MATH 201 Calculus 1 & Analytic Geometry		3	
BIOL 3060 Microbiology		4					
BIOL 3110, 3110L Physiology		3,1		<b>6. Select 1 course from the following:</b>			
				MATH 120 Introductory Statistics		3	
<b>2. Select 1 course from the following:</b>				MATH 210 Data Analysis & Stat Computing I		3	
BIOL 3020 Comparative Anatomy		4		STAT 319 Business Statistics		4	
BIOL 3030, 3030L Human Anatomy & Embryol		3,1		STAT 320 Research Statistics		4	
<b>3. BIOLOGY AREA COURSES: (Select 1 from each subcategory)</b>				<b>7. Select 1 course from the following:</b>			
				ECON 201 Principles of Macroeconomics		3	
<b>A. CELL/MOLECULAR BIOLOGY</b>				ECON 202 Principle of Microeconomics		3	
BIOL 2090 Cell Biology		4					
BIOL/ENVI 3040 Developmental Biology		4		<b>8. Select 1 course from the following:</b>			
BIOL 3180 Immunology		4			PSYC 201 Introduction to Psychology		3
BCHE/BIOL 3210 Molecular Biology		4			SOC 201 Introduction to Sociology		3
BCHE 307, 307L Biochemistry I		3,1					
				<b>To satisfy this major, the following courses must be completed once enrolled as a student at the PC School of Pharmacy:</b>			
<b>B. EVOLUTION/ECOLOGY/PLANT BIOLOGY</b>				PHRM 6104 Human Genetics/ Pharmacogen		2	
BIOL/ENVI 2030 Introductory Botany		4		PHRM 8299 Capstone I		1	
BIOL/ENVI 2060 Plant Systematics		4		PHRM 8399 Capstone II		1	
BIOL 2120 Evolution		4					
BIOL 3120 Plant Physiology		4					
BIOL/ENVI 3140 Ecology		4					
BIOL 3200 Paleontology		4					
<b>4. REQUIRED RELATED COURSES</b>							
CHEM 101, 101L General Chemistry I		3,1		<b>NOTE: With the exception of 3. Biology Area Courses, all pre-pharmacy courses listed on this card must be completed with a grade of “C” or better to satisfy the application requirements for the Presbyterian College School of Pharmacy.</b>			
CHEM 102, 102L General Chemistry II		3,1					
CHEM 221, 221L Organic Chemistry I		3,1					
CHEM 222, 222L Organic Chemistry II		3,1					
PHYS 1500 General Physics I		4					
SPCH 201 Public Speaking		3		<b>Total Hours Required</b>		<b>64-65</b>	