

## Biochemistry: Pre-Vet

<https://ag.purdue.edu/oap/Pages/major.aspx>

Credits	Course number	Course Title	Prerequisites	Credits	Course number	Course Title	Prerequisites
<b>Fall 1st Year</b>				<b>Spring 1st Year</b>			
0.5	AGR 10100	Introduction to the College of Agriculture and Purdue University		3 or 4*	BIOL 13100 or BIOL 11100	Biology II or Fundamentals of Biology II	BIOL 11000
0.5	AGR 11500	Introduction to Biochemistry Academic Programs		4	CHM 11600	General Chemistry	CHM 11500
2	BCHM 10000	Intro to Biochemistry		4	ENGL 10600	First-Year Composition	
4	(BIOL 12100 and BIOL 13500) or BIOL 11000	Biology I: Diversity, Ecology, and Behavior and First Year Biology Laboratory or Fundamentals of Biology I		3	MA 16020	Applied Calculus II	MA 16010
4	CHM 11500	General Chemistry					
3	MA 16010	Applied Calculus I	ALEKS 75+				
<b>14</b>				<b>14</b>			

<b>Fall 2nd Year</b>				<b>Spring 2nd Year</b>			
3	BCHM 22100	Analytical Biochemistry	CHM 11600	3	AGRY 32000 or BIOL 24100	Genetics	(BIOL 11000 or 12100) or (BIOL 23100, CHM 11600)
3	BIOL 23100	Biology III: Cell structure and Function	BIOL 11100 or 13100, CHM 11600	1 or 2*	AGRY 32100 or BIOL 24200	Genetics lab	
2	BIOL 23200	Laboratory in Biology III: Cell structure and Function		2	BCHM 29000	Experimental Design Seminar	
3	CHM 25500	Organic Chemistry	CHM 11600	3	BCHM 36100	Molecules	CHM 25500, (BIOL 11000 or 12100)
1	CHM 25501	Organic Chemistry Laboratory		3	CHM 25600	Organic Chemistry	CHM 25500
3	STAT 30100	Elementary Statistical Methods		1	CHM 25601	Organic Chemistry Laboratory	CHM 25501, pre/co: CHM 25600
				3	COM 11400 or COM 21700	Fundamentals of Speech or Science Writing and Presentation	
<b>15</b>				<b>16</b>			

<b>Fall 3rd Year</b>				<b>Spring 3rd Year</b>			
2	BCHM 32200	Analytical Biochemistry II	BCHM 22100	3	ANSC 22100	Animal Nutrition	CHM 11500
1	BCHM 39000	Professional Development Seminar		1	BCHM 49800	Research in Biochemistry	BCHM 36100
3	BCHM 46200	Metabolism	BCHM 36100	4	PHYS 22100	General Physics	PHYS 22000
1	BCHM 49800	Research in Biochemistry	BCHM 36100	1	VM 10200	Careers in Veterinary Medicine	
4	PHYS 22000	General Physics		3	-----	Humanities or Social Science Selective	
3	-----	UCC Humanities Selective		3*	-----	Elective	
<b>14</b>				<b>15</b>			

<b>Fall 4th Year</b>				<b>Spring 4th Year</b>			
3	BCHM 46300	Macromolecular Machines	BCHM 46200	2	BCHM 46500	Biochemistry of Life Processes	BCHM 46300
1	BCHM 49800	Research in Biochemistry	BCHM 36100	1	BCHM 49000	Undergraduate seminar	BCHM 49800
4	BIOL 22100	Introduction to Microbiology	CHM 11600	4	CHM 37200	Physical Chemistry	MA 16010 or MA 16020
3	-----	Economics Selective		3	-----	Humanities or Social Science Selective	
3	-----	Written or Oral Communication Selective		3	-----	Humanities or Social Science Selective (30000+ level)	
3	-----	Humanities or Social Science Selective		2*	-----	Elective	
<b>17</b>				<b>15</b>			

120 semester credits required for Bachelor of Science degree.  
2.0 GPA required for Bachelor of Science degree.

The highlighted course is considered critical; timely progress toward the degree depends upon steady progress through each course in the plan of study, but this course, in particular, should be completed by the semester indicated.

**Consultation with an advisor may result in an altered plan customized for an individual student.**

Official and complete prerequisite lists are in the course catalog; the incomplete listing presented here regards this program and course sequencing.

# Biochemistry: Pre-Vet

<https://ag.purdue.edu/oap/Pages/major.aspx> 120 credits required for graduation

Credits	Course number	Course Title
<b>Departmental/Program Major Courses (115-117 credits)</b>		
<b>Required Major Courses (25 credits)</b>		
2	BCHM 10000	Intro to Biochemistry
3	BCHM 22100	Analytical Biochemistry
2	BCHM 29000	Experimental Design Seminar
3	BCHM 36100	Molecules
2	BCHM 32200	Analytical Biochemistry II
1	BCHM 39000	Professional Development Seminar
3	BCHM 46200	Metabolism
3	BCHM 46300	Macromolecular Machines
2	BCHM 46500	Biochemistry of Life Processes
3	BCHM 49800	Research in Biochemistry
1	BCHM 49000	Undergraduate Seminar
<b>Other Departmental /Program Course Requirements (90-92 credits) (See Advising Resources)</b>		
0.5	AGR 10100	Introduction to the College of Agriculture and Purdue University
0.5	AGR 11500	Introduction to Biochemistry Academic Programs
	AGRY 32000 or	
3	BIOL 24100	Genetics
	AGRY 32100 or	
1 or 2	BIOL 24200	Genetics Lab
3	ANSC 22100	Animal Nutrition
	(BIOL 12100 and	
	BIOL 13500) or	
4	BIOL 11000	Biology I: Diversity, Ecology, and Behavior and First Year Biology Laboratory or Fundame
	BIOL 13100 or	
3 or 4	BIOL 11100	Biology II or Fundamentals of Biology II
4	BIOL 22100	Introduction to Microbiology
3	BIOL 23100	Biology III: Cell structure and Function
2	BIOL 23200	Laboratory in Biology III: Cell structure and Function
4	CHM 11500	General Chemistry (satisfies Science #1 for Core)
4	CHM 11600	General Chemistry (satisfies Science #2 for core)
3	CHM 25500	Organic Chemistry
1	CHM 25501	Organic Chemistry Laboratory
3	CHM 25600	Organic Chemistry
1	CHM 25601	Organic Chemistry Laboratory
4	CHM 37200	Physical Chemistry
3	MA 16010	Applied Calculus I (satisfies Quantitative Reasoning for core)
3	MA 16020	Applied Calculus II
4	PHYS 22000	General Physics
4	PHYS 22100	General Physics
3	STAT 30100	Elementary Statistical Methods
1	VM 10200	Careers in Veterinary Medicine
3	-----	<a href="#">Economics Selective (satisfies Human Culture Behavioral/Social Science for core)</a>
3	-----	<a href="#">UCC Humanities Selective (satisfies Human Cultures Humanities for core)</a>
3	-----	<a href="#">Humanities or Social Science Selective</a>
3	-----	<a href="#">Humanities or Social Science Selective</a>
3	-----	<a href="#">Humanities or Social Science Selective</a>
3	-----	<a href="#">Humanities or Social Science Selective (30000+ level)</a>
		First-Year Composition (satisfies Written Communication for core) (satisfies Information
4	ENGL 10600	Literacy for core)
	COM 11400 or	Fundamentals of Speech or Science Writing and Presentation (satisfies Oral
3	COM 21700	Communication for core)
3	-----	<a href="#">Written or Oral Communication Selective</a>

**Electives (3-5 credits)**  
3 to 5 Elective

**University Core Requirements:**

Human Cultures Humanities:	_____	Science, Technology, and Society:	_____
Human Cultures Behavioral/Social Science:	_____	Written Communication:	_____
Information Literacy:	_____	Oral Communication:	_____
Science #1:	_____	Quantitative Reasoning:	_____
Science #2:	_____		

120 semester credits required for Bachelor of Science degree.  
2.0 GPA required for Bachelor of Science degree.

**College of Agriculture & University Level Requirements:**

2.0 GPA required for Bachelor of Science degree.

32 Upper division credits taken from Purdue

9 credits International Understanding: \_\_\_\_\_

3 credits Multicultural Awareness: \_\_\_\_\_

9 credits of Hum and/or Social Sciences outside the College of Agriculture: \_\_\_\_\_