

Biochemistry: Pre-Med

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

Credits	Course number	Course Title	Prerequisites	Credits	Course number	Course Title	Prerequisites
Fall 1st Year				Spring 1st Year			
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+				

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Fall 2nd Year				Spring 2nd Year			
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	pre/co: AGRY 320 or BIOL 241
2	BIOL 23200	Laboratory in Biology III: Cell structure and Function	pre/co: BIOL 23100	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	pre/co: CHM 25500	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	

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Fall 3rd Year				Spring 3rd Year			
2	BCHM 32200	Analytical Biochemistry II	BCHM 22100	1	BCHM 49800	Research in Biochemistry	BCHM 36100
1	BCHM 39000	Professional Development Seminar		0	BIOL 39600	Premedical Planning Seminar	
3	BCHM 46200	Metabolism	BCHM 36100	1*	-----	Science Selective	
1	BCHM 49800	Research in Biochemistry	BCHM 36100	4	PHYS 22100	General Physics	PHYS 22000
4	PHYS 22000	General Physics		3	PSY 12000	Elementary Psychology	
3	SOC 10000	Introductory Sociology		3*	-----	Elective	
				3	-----	UCC Humanities Selective	

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Fall 4th Year				Spring 4th Year			
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
3 or 4*	BIOL 30100 or BIOL 20300	Human Design: Anatomy and Physiology or Human Anatomy and Physiology	BIOL 11000	3 or 4*	BIOL 30200 or BIOL 20400	Human Design: Anatomy and Physiology	BIOL 30100 or BIOL 20300
3	-----	Economics Selective		4	CHM 37200	Physical Chemistry	MA 16010 or MA 16020
3	-----	Written or Oral Communication Selective		3	-----	Humanities or Social Science Selective (30000+ level)	
3	-----	Humanities or Social Science Selective		3*	-----	Elective	

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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.

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120 credits required for graduation

Credits	Course number	Course Title
Departmental/Program Major Courses (114-117 credits)		
Required Major Courses (25 credits)		
_____	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
_____	3	BCHM 49800 Research in Biochemistry
_____	2	BCHM 46500 Biochemistry of Life Processes
_____	1	BCHM 49000 Undergraduate Seminar
Other Departmental /Program Course Requirements (89-92 credits) (See Advising Resources)		
_____	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
_____		(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
_____	3	BIOL 23100 Biology III: Cell structure and Function
_____	2	BIOL 23200 Laboratory in Biology III: Cell structure and Function
_____		BIOL 30100 or
_____	3 or 4	BIOL 20300 Human Design: Anatomy and Physiology or Human Anatomy and Physiology
_____		BIOL 30200 or
_____	3 or 4	BIOL 20400 Human Design: Anatomy and Physiology or Human Anatomy and Physiology
_____	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	PSY 12000 Elementary Psychology
_____	3	SOC 10000 Introductory Sociology
_____	3	STAT 30100 Elementary Statistical Methods
_____	0 or 1	----- Science Selective
_____	3	----- Economics Selective (satisfies Human Culture Behavioral/Social Science for core)
_____	3	----- UCC Humanities Selective (satisfies Human Cultures Humanities for core)
_____	3	----- Humanities or Social Science Selective
_____	3	----- Humanities or Social Science Selective (30000+ level)
_____		First-Year Composition (satisfies Written Communication for core) (satisfies Information
_____	4	ENGL 10600 Literacy for core)
_____		COM 11400 or
_____	3	COM 21700 Fundamentals of Speech or Science Writing and Presentation (satisfies Oral
_____	3	Communication for core)
_____		Written or Oral Communication Selective
Electives (3-6 credits)		
_____	3 to 6	----- 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.

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: _____