Biochemistry Field Major

The department of biological sciences and the department of chemistry and biochemistry participate jointly in this program. Students selecting this major should seek the advice of one of the departmental chairpersons as early as possible.

Program Requirements

A minimum total of 120 credit hours is required for the field major in biochemistry. The department of biological sciences and the department of chemistry and biochemistry participate jointly in this program. Students selecting this major should seek the advice of one of the departmental advisors or chairpersons as early as possible. In addition to meeting the requirements of the WSU General Education Program (http://catalog.wichita.edu/undergraduate/academic-information/ general-education-program/) and the requirements of Fairmount College of Liberal Arts and Sciences, students in the field major in biochemistry must take the following courses:

Select courses to meet General Education requirements134-35College RequirementsLAS Competencies and Electives - select enough courses to reach 1200-2credit hours and complete all LAS Competency Areas 1Major Core RequirementsCHEM 211General Chemistry I10& CHEM 211General Chemistry I10& CHEM 212and General Chemistry IICHEM 523Analytical Chemistry I10& CHEM 531Organic Chemistry I10& CHEM 662Biochemistry I6CHEM 662Biochemistry Laboratory3CHEM 666Special Topics in BiochemistryOr BIOL 666Special Topics in Biochemistryor BIOL 666Special Topics in BiochemistryOr BIOL 669Research in Biochemistry2or BIOL 669Research in BiochemistryBIOL 210General Biology I& BIOL 210General Biology IBIOL 419Genetics4BIOL 420Maio Genetics4BIOL 419Genetics4 <th>Course</th> <th>Title</th> <th>Hours</th>	Course	Title	Hours																																																																																																																												
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BIOL 640AC	Endocrinology		
BIOL 661	Pathogenic Microbiology		
BIOL 662	Virology		
BIOL 669	Research in Biochemistry		
or CHEM 669	Research in Biochemistry		
BIOL 710	Glycobiology		
BIOL 760	Experimental Molecular Biology Lab		
MATH 242	Calculus I		
MATH 243	Calculus II		
MATH 344	Calculus III		
Additional Science Requirements for the Biochemistry Field Major			
PHYS 213 & PHYS 214	General College Physics I and General College Physics II	10	
Select either Option A or Option B below		5-6	
Option A (5 credit hours)			
MATH 112	Precalculus Mathematics		
Option B (6 credit hours)			
MATH 111 & MATH 123	College Algebra and College Trigonometry		
Total Credit Hours		120	

¹ Required major courses may also count towards General Education and/or LAS Competencies. Students will need to select additional electives to reach 120 credit hours required for graduation with assistance from an advisor.

Applied Learning

Students in the BS — field major in biochemistry program are required to complete an applied learning or research experience to graduate from the program. The requirement can be met by completing at least one semester of undergraduate research, by enrollment in CHEM 669 or BIOL 669 (2 credit hours minimum).