

CHEMISTRY, BACHELOR OF SCIENCE WITH A CONCENTRATION IN PRE-PHARMACY (B.S.)

Program Requirements

CIP Code: 40.0501

Major

Code	Title	Hours
University Graduation Requirements		
General Education (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/)		36
<i>Foundations of Learning</i>		
GSD 101	Foundations of Learning	3
Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)		
Major Requirements		
<i>Core Courses</i>		
CHE 111 & 111L	General Chemistry and General Chemistry Lab I	4
CHE 112 & 112L	General Chemistry II and General Chemistry Lab	4
CHE 250 & 250L	Descriptive Inorganic Chemistry and Descriptive Inorganic Chemistry Lab	4
CHE 325 & 325L	Analytical Chemistry and Analytical Chemistry Lab	5
CHE 361 & 361L	Organic Chemistry I and Organic Chemistry Lab I	4
CHE 362 & 362L	Organic Chemistry II and Organic Chemistry Lab II	4
CHE 385	Chemical Literature	3
CHE 430	Biochemistry of Macromolecules	3
CHE 432	Biochemistry Laboratory	1
CHE 471 & 471L	Principles of Physical Chemistry I and Principles of Physical Chemistry I Lab	4
Concentrations		
Students must select one of the following Concentrations:		
Biochemistry		
Biochemistry (ACS Certification Optional)		
Pre-Health (Pre-Medical, Pre-Dental, Pre-Optometry, Pre-Physician Associate)		
Chemistry		
Chemistry (ACS Certification Optional)		
Pre-Pharmacy		40
Chemistry Teaching		
<i>Free Electives</i>		
Choose from 7 hours of free electives		7
Total Hours		122

Concentration

Code	Title	Hours
Concentration Courses		
CHE 425 & 425L	Instrumental Analysis and Instrumental Analysis Lab	4
CHE 450	Inorganic Chemistry	3
CHE 431	Metabolic Biochemistry	3
CHE 472	Principles of Physical Chemistry II	4
CHE 485	Chemistry Seminar	1
Choose from three hours of the following:		3
CHE 349	Applied Learning in Chemistry	
CHE 349A	Cooperative Study: Chemistry (A-N)	
CHE 495A	Independent Chemical Research	
CHE 495B	Chemistry Laboratory Independent Research: ____	
<i>Supporting Course Requirements</i>		
BIO 111	Cell and Molecular Biology (Element 4) ^G	
BIO 112	Ecology and Evolution (Element 4) ^G	
BIO 307	Human Anatomy and Physiology I	3
BIO 273	Clinical Microbiology	4
or BIO 320	Principles of Microbiology	
BIO 308	Human Anatomy and Physiology II	3
ECO 230	Fundamentals of Microeconomics	3
MAT 234	Calculus I (Element 2) ^{G,1}	
PHI 383	Health & Biomedical Ethics	3
PHY 131	College Physics I (Element 4) ^G	
or PHY 201	University Physics I	
PSY 200	Introduction to Psychology (Element 5B) ^G	
STA 270	Applied Statistics	4
Total Hours		40

^G Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.

¹ Preparatory courses in mathematics may be required before admission to MAT 122 Precalculus Mathematics or MAT 234 Calculus I.