

CHEMISTRY - BIOCHEMISTRY OPTION, BACHELOR OF SCIENCE

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Curriculum

Course	Title	Hours	Completed
Freshman			
Fall			
CHEM 2124 & CHEM 2120	General Chemistry I and General Chemistry I Lab	4	_____
ENGL 1013	Composition I ¹	3	_____
MATH 2914	Calculus I	4	_____
PHSC 1001	Orientation to Physical Science	1	_____
SS 1XXX	Social Science Courses ¹	3	_____
Hours		15	
Spring			
BIOL 1114	Principles of Biology	4	_____
CHEM 2134 & CHEM 2130	General Chemistry II and General Chemistry II Lab	4	_____
ENGL 1023	Composition II ¹	3	_____
MATH 2924	Calculus II	4	_____
PHSC 1011	Orientation to Physical Science II	1	_____
Hours		16	
Sophomore			
Fall			
CHEM 3254	Fundamentals of Organic Chemistry	4	_____
COMS 2003 or COMS 2803	Microcomputer Applications or Programming in C	3	_____
Select one of the following:		4	_____
PHYS 2014 & PHYS 2000	Algebra-Based Physics I and Physics Laboratory I		_____
PHYS 2114 & PHYS 2000	Calculus-Based Physics I and Physics Laboratory I		_____
SS 1XXX	Social Science Courses ¹	3	_____
Hours		14	
Spring			
CHEM 3245	Quantitative Analysis	5	_____
CHEM 3264	Mechanistic Organic Chemistry	4	_____
Select one of the following:		4	_____
PHYS 2024 & PHYS 2010	Algebra-Based Physics II and Physics Laboratory II		_____
PHYS 2124 & PHYS 2010	Calculus-Based Physics II and Physics Laboratory II		_____
USHG 1XXX	U.S. History and Government ¹	3	_____
Hours		16	
Junior			
Fall			
BIOL 2124	Principles of Zoology	4	_____

CHEM 3301	Chemistry Seminar	1	_____
CHEM 3344	Principles of Biochemistry	4	_____
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	_____
Elective ²		4	_____
Hours		16	
Spring			
BIOL 2014	Human Anatomy	4	_____
BIOL 3034	Genetics	4	_____
CHEM 3423	Descriptive Inorganic Chemistry	3	_____
CHEM 3363	Metabolic Biochemistry	3	_____
Hours		14	
Senior			
Fall			
BIOL 3074 or BIOL 3174	Human Physiology or Physiological Ecology	4	_____
CHEM 3324	Physical Chemistry I	4	_____
CHEM 4414	Instrumental Analysis	4	_____
CHEM 4951 or CHEM 4991	Undergraduate Research in Chemistry or Special Problems in Chemistry	1	_____
CHEM Elective (3000-4000 level)		3	_____
Hours		16	
Spring			
BIOL 4033	Cell Biology	3	_____
FAH 1XXX	Fine Arts and Humanities Courses ¹	3	_____
CHEM 4401	Chemistry Seminar	1	_____
CHEM 4951 or CHEM 4991	Undergraduate Research in Chemistry or Special Problems in Chemistry	1	_____
SFHS 1XXX	Social Sciences/Fine Arts/ Humanities/Communication Courses ¹	3	_____
Elective ²		2	_____
Hours		13	
Total Hours		120	

¹ See appropriate alternatives or substitutions in "General Education Requirements (<https://catalog.atu.edu/undergraduate/general-education-requirements/>). A specific general education core course does not have to be taken in the semester listed, any other part of the general education core at any time is acceptable as well.

² German, Statistics, and Technical Communications are encouraged. (Electives must include sufficient upper-division courses to result in 40 upper division hours) (upper division = 3000-4000 level).