

MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BS CHEMISTRY**
 Option: **BIOCHEMISTRY**
 Major Field Requirements: **52.0 Credits**
 Other Requirements: **29.0-30.0 Credits**

When applicable, up to six of the **REQUIRED RELATED** courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

Course	No.	Short Title	C.H.	Grade	Course	No.	Short Title	C.H.	Grade
REQUIRED CHEMISTRY COURSES (47.0 Credits)					REQUIRED RELATED (29.0-30.0 credits)				
CHEM	111	Intro Chemistry I	4.0	_____	Mathematics (12.0 credits)				
CHEM	112	Intro Chemistry II	4.0	_____	MATH	161	Calculus I	4.0	_____
CHEM	188	Freshman Seminar	1.0	_____	MATH	211	Calculus II	4.0	_____
CHEM	231	Organic Chem I	4.0	_____	MATH	311	Calculus III	4.0	_____
CHEM	232	Organic Chem II	4.0	_____	Physics (10.0 credits)				
CHEM	251	Inorganic Chem I	3.0	_____	PHYS	231	Physics I with Calc	5.0	_____
CHEM	265	Quant Analysis	4.0	_____	PHYS	232	Physics II with Calc	5.0	_____
CHEM	326	Biochemistry I	4.0	_____	BIOLOGY (7.0-8.0 credits)				
CHEM	327	Biochemistry II	4.0	_____	Demonstrate competency in Biology 100*				
CHEM	328	Analytical Biochem Lab	1.0	_____	BIOL	364	Fndns Genetics/Mole	4.0	_____
CHEM	341	Physical Chem I	4.0	_____	Select one additional course from the following:				
CHEM	342	Physical Chem II	4.0	_____	BIOL	362	Cell/Devel Biology	4.0	_____
CHEM	465	Analytical Chemistry	4.0	_____	BIOL	461	General Microbiol	3.0	_____
CHEM	487	Seminar in Chem I	0.5	_____	BIOL	462	Molecular Biology	4.0	_____
CHEM	488	Seminar in Chem II	0.5	_____	*Competency may be demonstrated by one of the following:				
CHEM	498	Independent Study	1.0	_____	1) a course grade of "A" or "B" in AP Biology				
CHEMISTRY ELECTIVES (5.0 Credits)					2) a score of 3 or better in the national AP exam				
CHEM	312	Chem in Nanotech	3.0	_____	3) a successful score on the CLEP exam				
CHEM	300	Cooperative Educ	3.0	_____	4) a passing grade for General Biology (BIOL 100):				
CHEM	400	Cooperative Educ	3.0	_____	required for 300 or 400-level courses. B- or higher is required if changing to biology major.				
CHEM	375	Environmental Chem	4.0	_____	General Electives (as necessary)				
CHEM	381	Polymer Chemistry I	4.0	_____	_____	_____	_____	_____	_____
CHEM	391	Advanced Lab I	1.0	_____	_____	_____	_____	_____	_____
CHEM	392	Advanced Lab II*	1.0	_____	_____	_____	_____	_____	_____
CHEM	435	Advanced Organic Chem	3.0	_____	_____	_____	_____	_____	_____
CHEM	452	Inorganic Chem II	3.0	_____	_____	_____	_____	_____	_____
CHEM	476	Environmental Chem II	4.0	_____	_____	_____	_____	_____	_____
CHEM	482	Polymer Chemistry II	3.0	_____	_____	_____	_____	_____	_____
CHEM	486	Topics in Chemistry	1.0-4.0	_____	_____	_____	_____	_____	_____
CHEM	498	Independent Study **	1.0-3.0	_____	_____	_____	_____	_____	_____
CHEM	489	Department Honors	1.0-3.0	_____	_____	_____	_____	_____	_____
CHEM	499	Department Honors	1.0-3.0	_____	_____	_____	_____	_____	_____
* This elective must be completed to gain ACS certification in Biochemistry.									
** Students seeking ACS certification must take a minimum of two hours credit of CHEM 498 under Chemistry Electives.									

