

**Bachelor of Science in Chemistry  
Concentration in Biochemistry  
Program Requirements Check-List Additions/Modifications  
2017&2018 bulletin**

**B.S. in Chemistry..... with Biochemistry Concentration**

**Follow the Checklist for a B.S. in Chemistry with the following additions/changes:**

**1. B.S. IN CHEMISTRY MAJOR REQUIREMENTS<sup>1</sup>**

\_ same courses as B.S.

_ these two 500 Level Chemistry Electives	(hr)	Semester	Grade	
CHEM A522 (Instrumental Analysis and Lab)	(5)	_____	_____	(must be C or higher)
CHEM A550 (Advanced Biochemistry and Lab)	(4)	_____	_____	(must be C or higher)

**2. GENERAL EDUCATIONAL REQUIREMENTS**

\_ same courses as B.S.

_ to Natural Sciences add	(hr)	Semester	Grade
BIOL A122 (Biology II) <sup>4</sup>	(4)	_____	_____

**3. BIOCHEMISTRY COGNATE**

Course Num. ( Title )	(hr)	Semester	Grade	
BIOL A541 Princp. Biochem. <sup>4</sup>	(4)	_____	_____	(must be C or higher)
BIOL A350 or A360 Fund. of Genet. or Animal Physiol. <sup>4</sup>	(3-4)	_____	_____	(must be C or higher)
BIOL A502 Cell & Molec Biol <sup>4</sup>	(4)	_____	_____	(must be C or higher)

**Cognate: Total 10-11 credit hours**

**4. ELECTIVES (A total of at least 120 credit hours is required for graduation)**

\_ same courses as B.S.

- 1 - A grade of C or higher is required in all chemistry courses counting toward the degree. Students placing in Mathematics 108 or below will successful complete these courses before enrolling in any chemistry course.
- 2 - Completion of a thesis and seminar on the research project are required for graduation.
- 3 - PHYS A212 can be counted toward a cognate.
- 4 - BIOL A121 and CHEM A332 are prerequisites for BIOL A541. At least a C in BIOL 121/122 are pre-requisites for BIOL 350. At least a C in BIOL 121/122 and either BIOL A350 or BIOL A360 are pre-requisites for 502.
- 5 - At least three (3) credit hours of the degree must be in non-Western studies. A list of courses that meet this requirement can be found in the Academic Regulations/General Education Section of the appropriate Student Bulletin and in the Non-Western section of Degree Works.
- 6 - Students must complete English 101/102 with a grade of C or better in order to fulfill general education requirements. Freshmen should take English in their first semester unless they have already completed the 101/102 requirement. Students must complete AEGL 102 with a grade of C or better before taking other English courses and for any course to count as Writing Intensive including ACHM 541L, 542L, and 511L.
- 7 - Freshmen should take Math in their first semester unless they have already completed their math requirement. MATH 111 and MATH 112 may be taken in any order or at the same time. MATH 111 and 112 are pre-requisites for AMTH 141/142. MATH 141 is a pre-requisite for MATH 142.
- 8 - Transfer students need one WI course for each 30 hours at USCA including one in the major.

(May 2018 Revised)