

**SUGGESTED PROGRAM OF STUDY**  
**Bachelor of Science - Major in Chemistry<sup>1</sup> General Track**  
 with MATH 108 Placement PHYS 201/202 2014-2016 bulletin

**First Year**

**Fall Semester**

BIOL 121	(Biology I)	(4)_____
MATH 108	(Pre-Calc. I)	(3)_____
AFCI 101	(Critical Inquiry)	(1)_____
ENGL 101	(Composition) <sup>2</sup>	(3)_____
Humanities or Social Science <sup>3</sup>		(3)_____
AFYS 101	(First Year Seminar)	(1)_____

14 credit hours

**Spring Semester**

CHEM 111	(General Chem. I)	(4)_____
MATH 111	(Pre-Calc. I)	(3)_____
MATH 112	(Pre-Calc. II)	(3)_____
ENGL 102	(Comp. and Lit.) <sup>2</sup>	(3)_____
History of Civ. (either HIST 101 or 102)		(3)_____

16 credit hours

**Summer**

CHEM 112	(General Chem. II)	(4)_____
----------	--------------------	----------

**Second Year**

**Fall Semester**

CHEM 331	(Org Chem. I)	(3)_____
CHEM 331L	(Org. I Lab)	(1)_____
PHYS 201	(Gen. Physics I)	(4)_____
MATH 141	(Calc. I)	(4)_____
Amer. Gov't (HIST 201 or 202 or POLY 201)		(3)_____

15 credit hours

**Spring Semester**

CHEM 332	(Org Chem. II)	(3)_____
CHEM 332L	(Org. Lab II)	(1)_____
PHYS 202	(Gen. Physics II) <sup>4</sup>	(4)_____
MATH 142	(Calc. II)	(4)_____
CHEM 310	(Research Meth.)	(1)_____
Communications (COMM 201 or 241)		(3)_____

16 credit hours

**Summer I/II**

Humanities/ Social Science <sup>3</sup> or Cogante*	(3/4)_____
-----------------------------------------------------	------------

**Third Year**

**Fall Semester**

CHEM 321	(Quant. Analysis)	(3)_____
CHEM 321 L	(Quant. Anal. Lab)	(1)_____
CHEM 541	(Phys. Chem I)	(3)_____
CHEM 541 L	(Phys Chem I Lab)	(1)_____
BIOL 541	(Biochem)	(3)_____
Second Language 1 <sup>5</sup>		(4)_____

15 credit hours

**Spring Semester**

CHEM 311	(Intro Inorg. Chem.)	(3)_____
CHEM 311L	(Intro Inorg. Chm Lab)	(1)_____
CHEM 542	(Phys. Chem II)	(3)_____
CHEM 542L	(Phys Chem. II Lab)	(1)_____
Humanities/Soc. Science/Cognate* <sup>3</sup>		(3/4)_____
Second Language 2 <sup>5</sup>		(4)_____

15/16 credit hours

**Fourth Year**

**Fall Semester**

CHEM 511	(Adv. Inorg. Chem)	(3)_____
CHEM 511L	(Adv. Inorg. Ch. Lab)	(1)_____
CHEM 499	(Senior Res.) <sup>6</sup>	(2)_____
Cognate/Minor*		(3/4)_____
Humanities or Soc Sci or Cognate* <sup>3</sup>		(3)_____
Humanities or Social Science <sup>3</sup>		(3)_____

15/16 credit hours

**Spring Semester**

CHEM 522	(Inst. Anal.)	(5)_____
Humanities or Social Science <sup>3</sup>		(3)_____
CHEM 499	(Senior Res) <sup>6</sup>	(1/2)_____
Cognate/Minor*		(3/4)_____
Cognate/Minor*		(3/4)_____

15/17 credit hours

- 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 successfully complete these courses before enrolling in any chemistry course.
  - 2 - Students must complete English 101/102 with a grade of C or better in order to fulfill general education requirements. Students must complete ENGL 102 with a grade of C or better before taking other English courses and for any course to count as Writing Intensive including CHEM 541L, 542L, and 511L.
  - 3 - At least three (3) credit hours of the degree must be in non-Western studies.
  - 4 - BIOL 541 and PHYS 212 can be counted toward a cognate.
  - 5 - Two (2) semesters of the same language are required.
  - 6 - Completion of a thesis and seminar on the research project are required for graduation.
- \* The cognate requirement can be completed with either 4 three credit courses including at least one math/humanities/cognate taken during the summer: OR 3 four credit courses and no summer school (e.g. MATH 241/242, BIOL 250, BIOL 242). Many Humanities and Social Sciences courses are offered on-line over the summer. A partial list of 4 credit cognates includes; MATH 241, PHYS 212, POLY 301, HIST 300, SOCY 310, BIOL 242, BIOL 250, several 300+ BIOL courses including BIOL 302/312/315/316/320/325/330.

(Revised June 2016)