## Fayetteville State University Four-Year Degree Plan

## **Bachelor of Science in Chemistry**

Catalog: 2016-2017

With advisor approval, some courses listed below may be taken in an alternate semester and order. Courses that fulfill requirements are on the reverse side of this Plan. The advisor and student must consider prior credit, prerequisites, course availability, other program requirements, and student needs in developing the individual plan. Consult the appropriate Catalog for more information.

Course/Requirement	Cr	Prereq	Notes	Course/Requirement	Cr	Prereq	Notes
Year 1 Term 1				Term 2			
UNIV 101, Freshman Seminar I	1	No	1	UNIV 102, Freshman Seminar II	1	No	1
ENGL 110, English Composition I	3	No		ENGL 120, English Composition II	3	Yes	
PHIL 110 Or PHIL 220	3	No	2	MATH 130, Precalculus Mathematics II	3	Yes	
MATH 129 Or MATH 131	3	Yes	3	CHEM 141, General Chemistry I Lecture	3	Yes	4
Core Humanities Creative Arts	3	Check		CHEM 142, General Chemistry I Lab	1	Yes	4
Core Transitional Life Skills	1	No		Core Transitional Life Skills	1	No	
Term Total	14			Core Global Literacy - Foreign Language	3	Check	5
				Term Total	15		
Year 2 Term 1			<del></del> ,	Term 2			
CHEM 161, General Chemistry II Lecture	3	Yes	4	BIOL 150, Principles of Biology	4	Yes	
CHEM 162, General Chemistry II Lab	1	Yes	4	CHEM 200, Chem Lit Search and Analysis	2	Yes	
MATH 142, Calculus with AnalyticGeometry	4	Yes		CHEM 211, Analytical Chemistry Lecture	3	Yes	
BADM 215 Or SPEE 200	3	Yes		CHEM 212, Analytical Chemistry Lab	2	Yes	
Core Social Science	3	Check		MATH 241, Calculus with Anal Geometry II	4	Yes	
Term Total	14			Core Ethics Civic Engagement	3	Check	2
				Term Total	18		
Year 3 Term 1				Term 2			
CHEM 223, Organic Chemistry I Lecture	3	Yes		CHEM 225, Organic Chemistry II	4	Yes	
CHEM 224, Organic Chemistry I Lab	1	Yes		CHEM 226, Organic Chemistry II Lab	1	Yes	
CHEM 311, Instrumental Analysis Lecture	3	Yes		CHEM 313, Physical Chemistry I	3	Yes	
CHEM 311L	2	Yes		CHEM 313L	1	Yes	
MATH 242, Calculus w/ Anal Geom III	4	Yes		CHEM 390, Research I	1	No	
PHYS 125, College Physics I	3	Yes		PHYS 126, College Physics II	3	Yes	
PHYS 125L	1	Yes		PHYS 126L	1	Yes	
Term Total	17			Science or Math Elective	3	Check	
				Term Total	17		
Year 4 Term 1				Term 2			
BICH 411, Biochemistry I	3	Yes		CHEM 421, Inorganic Chemistry	3	Yes	
CHEM 314, Physical Chemistry II	3	Yes		CHEM 499, Chemistry Capstone	3	Yes	
CHEM 314L	1	Yes		Science or Math Elective	3	Check	
CHEM 491, Research II	2	Yes		Chemistry Elective	3	Check	
Science or Math Elective	3	Check		Term Total	12		
Chemistry Elective	3	Check					
Term Total	15						

Prereq--Yes: Course/Requirement has prerequisite(s). No: Course/Requirement has no prerequisite. Check: Some courses satisfying requirement have prerequisites and/or courses have non-prerequisite restrictions. Check Catalog and advisor for details.

- UNIV 101-102 required for first time students; UNIV 110 for transfers with fewer than 30 transfer credits. No credit earned if waived. UNIV 111 may be required based on academic performance.
- 3. MATH 121 may be required based on profile scores. Some core courses require a one-hour lab.
- Not required for students with 30+ transfer credits from a foreign institution. No credit earned if waived.
- Not required for students with 60+ transfer credits. No credit earned if waived.

Last Update: 4/30/2017

4. At least one natural science class must include a lab. Some majors require two lab sciences, increasing requirement to 8 credits.

## **Degree Requirements**

## **Bachelor of Science in Chemistry**

Catalog 2016-2017

Requirement: Courses	Pr	С
Core		
Transitional UNIV: (UNIV 101 And UNIV 102) Or UNIV 110 Or UNIV 111	No	2
Transitional Life Skills: ENTR 100 Or FINC 100 Or GEOG 110 Or HEED 112 Or PEDU 101 Or PEDU 107 Or PEDU 112 Or PEDU 120 Or PEDU 122 Or PEDU 130 Or PEDU 132 Or PEDU 140	No	2
Written Communication: ENGL 110	No	3
Oral Communication: BADM 215 Or SPEE 200	Yes	3
Critical Thinking: PHIL 110 Or PHIL 220	No	3
Quantitative Reasoning: MATH 129 Or MATH 131	Yes	3
Information Literacy: ENGL 120	Yes	3
Natural Science: CHEM 141 And CHEM 142 And CHEM 161 And CHEM 162	Yes	6
Social Science: CRJC 210 Or ECON 211 Or ECON 212 Or GEOG 210 Or HIST 212 Or POLI 200 Or POLI 210 Or POLI 220 Or PSYC 210 Or SOCI 210	Check	3
Humanities Creative Arts: ART 210 Or COMM 220 Or ENGL 220 Or ENGL 223 Or ENGL 240 Or ENGL 250 Or ENGL 253 Or HIST 210 Or HUMN 211 Or HUMN 212 Or MUSI 210 Or MUSI 225 Or MUSI 260 Or PHIL 210 Or RELI 215 Or THEA 203	Check	3
<b>Global Literacy:</b> ANTH 210 Or ART 150 Or ART 215 Or BADM 210 Or CHIN 110 Or CHIN 120 Or ENGL 211 Or ENGL 212 Or FREN 110 Or FREN 120 Or GEOG 220 Or GLBL 200 Or HIST 110 Or HIST 120 Or HIST 270 Or PHIL 211 Or POLI 230 Or SOCI 150 Or SPAN 110 Or SPAN 112 Or SPAN 120 Or SPAN 122 Or THEA 242 Or YORU 110 Or YORU 120	Check	3
Ethics Civic Engagement: BADM 220 Or CRJC 203 Or EDUC 211 Or ENGL 232 Or ENGL 233 Or ETCE 101 Or ETCE 102 Or ETCE 103 Or ETCE 200 Or GEOG 270 Or HCM 200 Or HIST 211 Or PHIL 120 Or PHIL 212 Or PNUR 210 Or POLI 110 Or POLI 150 Or SWRK 220	Check	3
Core Total:		39
Program		
Chemistry Courses: BICH 411 And CHEM 200 And CHEM 211 And CHEM 212 And CHEM 223 And CHEM 224 And CHEM 225 And CHEM 226 And CHEM 311 And CHEM 311L And CHEM 313 And CHEM 313L And CHEM 314 And CHEM 314L And CHEM 390 And CHEM 421 And CHEM 491 And CHEM 499	Yes	41
Chemistry Electives: CHEM 400 Or CHEM 422 Or CHEM 423 Or CHEM 424 Or CHEM 430 Or CHEM 431 Or BICH 412 Or MATS 301 Or MATS 311 Or MATS 321 Or MATS 360 Or MATS 423 Or MATS 460	Check	6
Correlative: BIOL 150 And MATH 130 And MATH 142 And MATH 241 And MATH 242 And PHYS 125 And PHYS 125L And PHYS 126 And PHYS 126L	Yes	27
Science and Math: CSC 105 Or any BICH, BIOL, BTCH, CHEM, FORS, MATH, MATS, PHYS, STAT, or ZOOL courses at the 200 level or above.	Check	g
Program Total:		83
Degree Total:		122

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