

## B.A. in Chemistry with a Concentration in Secondary Education

<b>First Semester</b>			<b>Second Semester</b>		
CHM 115	Elements & Compounds	3	CHM 116	The Chemical Reaction	3
CHM 113	Elements & Compounds Lab	1	CHM 114	The Chemical Reaction Lab	1
MTH 111	Calculus I	4	MTH 112	Calculus II	4
ENG 101	English 101	4	ENG 120	Intro to Lit & Culture	3
FYF 101	First Year Foundations	3	CS 125	Computer Science I	4
			ED 180	Educational Psychology	3
<b>Semester Total</b>		<b>15</b>	<b>Semester Total</b>		<b>18</b>
<b>Third Semester</b>			<b>Fourth Semester</b>		
CHM 231	Organic Chemistry I	3	CHM 232	Organic Chemistry II	3
CHM 233	Organic Chemistry I Lab	1	CHM 234	Organic Chemistry II Lab	1
PHY 201	Physics I	4	PHY 202	Physics II	4
ED 190	Effective Teaching	3	CHM 248	Analytical Chemistry	3
	Distr. Req. (PSY 101 rec'd)	3	CHM 246	Analytical Chemistry Lab	1
	Distribution Requirement	3	MTH 212	Multivariate Calculus	4
<b>Semester Total</b>		<b>17</b>	<b>Semester Total</b>		<b>16</b>
<b>Fifth Semester</b>			<b>Sixth Semester</b>		
CHM 341	Instrumental Analysis	3	CHM 322	Inorganic Chemistry	3
CHM 343	Instrumental Analysis Lab	1	CHM 365	Medical Biochemistry	4
CHM 355	Physical Chem./Life Sciences	3	CHM 370	Integrated Chemistry Lab	1
CHM 357	Physical Chem./Life Sci. Lab	1	CHM 390	Junior Seminar	1
EDSP 210	Teaching Special Needs	3	ED 191	Classroom Technology	3
	Distribution Requirement	3	EDSP 225	Special Ed Methodology	3
	Distribution Requirement	3			
<b>Semester Total</b>		<b>17</b>	<b>Semester Total</b>		<b>15</b>
<b>Seventh Semester</b>			<b>Eighth Semester</b>		
CHM 391	Senior Research	2	CHM 392	Senior Research	2
CHM 371	Integrated Chemistry Lab	1	EDSP 388	Inclusionary Practices	3
ED 220	Diverse Learners	3	ED 390	Student Teaching	12
ED 380	Content Literacy	3			
ED 371	Special Methods: Sciences	4			
	Distribution Requirement	3			
<b>Semester Total</b>		<b>16</b>	<b>Semester Total</b>		<b>17</b>
<hr/>					
<b>Grand Total</b>					<b>131</b>

⇒ Students in the B.A. program must complete 2 credits (total) of Integrated Laboratory (CHM 370/371/372).

## Wilkes University Education Department Checklist

**Bachelor of Arts-CHEMISTRY**  
**With a Major\* or Minor in Secondary Education**  
**2017-2018**

Name \_\_\_\_\_

WIN \_\_\_\_\_

Advisor \_\_\_\_\_ Date \_\_\_\_\_

**General Education Requirements**

\_\_\_\_ FYF 101 (3)

Area I The Humanities (9)

\_\_\_\_ ENG 120

\_\_\_\_ HST 101

\_\_\_\_ PHL 101 or Foreign Language \_\_\_\_\_

Area II The Scientific World (6) (met in major)

(two different sub-areas required)

\_\_\_\_ BIO 105 / 121

\_\_\_\_ CHM 105 / 115

\_\_\_\_ EES 105 / 221 / 230 / 240 / 251

\_\_\_\_ PHY 105 / 174 / 201

Area III The Social Sciences (6)

\_\_\_\_ ANT 101

\_\_\_\_ EC 102

\_\_\_\_ PS 111

\_\_\_\_ PSY 101 (required for minor)

\_\_\_\_ SOC 101

Area IV The Visual and Performing Arts (3)

\_\_\_\_ ART 101

\_\_\_\_ DAN 100

\_\_\_\_ MUS 101

\_\_\_\_ THE 100

**Skill Requirements**

I. Computer Literacy (met in major)

\_\_\_\_ CS 115 or higher \_\_\_\_\_

or two CI Courses \_\_\_\_\_

II. Written Communications (Required for certification)

\_\_\_\_ ENG 101 (4 credits)

III. Oral Communications (met in major)

\_\_\_\_ COM 101 or Two OPO Courses:

\_\_\_\_ EDSP 225, ED 220, ED 390, CHM 391, CHM 392

IV. Quantitative Reasoning (met in major)

\_\_\_\_ MTH 101 or higher \_\_\_\_\_

**Chemistry Major Requirements**

__ CHM 115	Elements & Compounds	F	(3)
__ CHM 113	Elements & Compounds Lab	F	(1)
__ CHM 116	The Chemical Reaction	S	(3)
__ CHM 114	The Chemical Reaction Lab	S	(1)
__ CHM 231	Organic Chemistry I	F	(3)
__ CHM 233	Organic Chemistry I Lab	F	(1)
__ CHM 234	Organic Chemistry II	S	(3)
__ CHM 234	Organic Chemistry II Lab	S	(1)
__ CHM 248	Analytical Chemistry	S	(3)
__ CHM 246	Analytical Chemistry Lab	S	(1)
__ CHM 322	Inorganic Chemistry	S	(3)
__ CHM 341	Instrumental Analysis	F	(3)
__ CHM 343	Instrumental Analysis Lab	F	(1)
__ CHM 355	Physical Chem for Life Science	F	(3)
__ CHM 357	Physical Chem for Life Sci. Lab	F	(1)
__ CHM 365	Medical Biochemistry	S	(3)
__ CHM 370 <sup>†</sup> /371 <sup>†</sup> /372 <sup>†</sup>	(two credits total)	F,S	(2)
<sup>†</sup> can each be taken for one or two credits			
__ CHM 390	Junior Seminar	S	(1)
__ CHM 391	Senior Research I (OPO)	F	(2)
__ CHM 392	Senior Research II (OPO)	S	(2)
__ CS 125	Computer Science I	F,S	(4)
__ MTH 111	Calculus I	F,S	(4)
__ MTH 112	Calculus II	F,S	(4)
__ MTH 212	Multivariate Calculus	F,S	(4)
__ PHY 201	General Physics I	F,S	(4)
__ PHY 202	General Physics II	F,S	(4)

**Major\* and Minor Requirements for  
Secondary Education Certification**

__ ED 180	Educational Psychology	(3)
__ ED 190	Effective Teaching	(3)
__ ED 191	Integrating Technology in Classrooms (C.I.)	(3)
__ ED 220	Tchg Cult & Ling Diverse Learners (OPO)	(3)
__ EDSP 210	Teaching Students with Special Needs	(3)
__ EDSP 225	Special Education Methodology (OPO)	(3)
__ ED 345*	Assessment	F,S (3)
__ ED 371	Teaching Methods in Science	F (4)
__ ED375*	Middle Level & Secondary Ed. Methods	S (4)
__ ED 380	Content Area Literacy	F (3)
__ EDSP 388	Inclusionary Practs (taken with ED 390)	(3)
__ ED 390	Student Teaching (OPO)	(12)
total for the minor		40 credits
*total for the major		47 credits

\*Required for major. Completion of major in Secondary Education along with Chemistry major will take additional semester or summer coursework. Completion of the minor can be accomplished in eight semesters