

## 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	3	PHY 202	Physics II	3
PHY 203	Physics I Lab	1	PHY 202	Physics II Lab	1
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>
					<b>131</b>
<b>Grand Total</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**  
**2018-2019**

Name \_\_\_\_\_

WIN \_\_\_\_\_

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

### General Education Requirements

\_\_\_ FYF 101 (3)

#### Area I The Humanities (9)

\_\_\_ ENG 120  
 \_\_\_ HST 101  
 \_\_\_ PHL 101, PHL 110, 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, 140, or 141  
 \_\_\_ 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<sup>†</sup>

___ 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*/371*/372*	(two credits total)	F,S	(2)
<small>*can each be taken for one or two credits</small>			
___ CHM 390	Junior Seminar	S	(1)
___ CHM 391	Senior Research I ( <i>OPO</i> )	F	(2)
___ CHM 392	Senior Research II ( <i>OPO</i> )	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)

<sup>†</sup>The Chemistry and Math Departments require that students complete prerequisite courses with at least a 2.0 .

### 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