



ELIZABETH CITY STATE UNIVERSITY

Curriculum Guide for Bachelor of Science Degree: Chemistry

ASSOCIATE OF SCIENCE DEGREE: *Universal General Education Component (UGETC)*

First two years (Freshman and Sophomore) to be completed at community college.

<u>Community College Course #</u>	<u>Hours</u>	<u>Community College Course Title</u>	<u>Elizabeth City State University Equivalency</u>	<u>Hours</u>	<u>Comments</u>
<u>English Composition</u>	<u>6 SHC</u>	<i>The following two English composition courses are required.</i>			
ENG 111	3 SHC	Writing and Inquiry	ENGL 102 Eng. Comp & Grammar	3 SHC	Required by Major.
ENG 112	3 SHC	Writing/Research in the Disciplines	ENGL 103 Eng. Comp & Vocab.	3 SHC	Required by Major.
<u>Social/ Behavioral Science</u>	<u>9 SHC</u>	<i>Select three courses from the following from at least two different disciplines.</i>			
HIS 111	3 SHC	World Civilizations I	HIST 140 World Civ. I	3 SHC	Must complete HIST 140 or HIST 141. Required by Major.
HIS 112	3 SHC	World Civilizations II	HIST 141 World Civ. II	3 SHC	
HIS 131	3 SHC	American History I	HIST 255 American History to 1877	3 SHC	Must select one (1) additional course in the Social/Behavioral Science category.

HIS 132	3 SHC	American History II	HIST 256 American History Since 1877	3 SHC	
ECO 251	3	Principles of Microeconomics	ECON 201 Prin. of Econ. I	3	Required by Major.
ECO 252	3	Principles of Macroeconomics	ECON 202 Prin. of Econ. II	3	
POL 120	3	American Government	POLS 298 American National Government	3	
PSY 150	3	General Psychology	PSY 212 General Psychology	3	
SOC 210	3	Intro to Sociology	SOC 201 Intro to Sociology	3	
Humanities/Fine Arts	9 SHC	<i>Select two courses from the following from at least two different disciplines.</i>			
<u>Communications</u>					
COM 231	3 SHC	Public Speaking	SPCH 314 Public Speaking	3 SHC	Required by Major.
<u>Humanities/Fine Arts</u>					
ART 111	3 SHC	Art Appreciation	ART 130 Art Appreciation	2 SHC	Required by Major. (Take either ART 111 or MUS 110) 1 hr. used as an elective.
ART 114	3 SHC	Art History Survey I			
ART 115	3 SHC	Art History Survey II			
ENG 231	3 SHC	American Literature I	HIST 201 World Literature I	3 SHC	Required by Major.
ENG 232	3 SHC	American Literature II	HIST 202 World Literature II	3 SHC	
MUS 110	3 SHC	Music Appreciation	MUS 135 Intro to Music	2 SHC	Required by Major. (Take either ART 111 or MUS 110) 1 hr. used as an elective.
MUS 112	3 SHC	Introduction to Jazz			
PHI 215	3 SHC	Philosophical Issues	Social/Behavioral Science	3 SHC	
PHI 240	3 SHC	Introduction to Ethics	Elective		
Mathematics	8 SHC	<i>Select two courses from the following:</i>			
MAT 171	4 SHC	Pre-calculus Algebra	MATH 115 College Algebra	3 SHC	
MAT 172	4 SHC	Pre-calculus Trigonometry	MATH 118 Pre-calculus	3 SHC	Required by Major.
MATH 263	4 SHC	Brief Calculus	MATH 153 Applied Calculus	3 SHC	
MATH 271	4 SHC	Calculus I	MATH 165 Calculus I	4 SHC	Required by Major.

Natural Sciences	8 SHC	<i>Select 8 SHC from the following courses:</i>			Note: Biology, Chemistry, and Physics courses must be taken in sequence.
BIO 110	4 SHC	Principles of Biology	BIOL 100/100L Principles of Biological Science/Lab	4 SHC	
BIO 111	4 SHC	General Biology I	BIOL 101/L General Bio. I	4 SHC	Required by Major.
BIO 112	4 SHC	General Biology II	BIOL 102/L General Bio II	4 SHC	Required by Major.
GEL 111	4 SHC	Introduction to Geology	Natural Science Elective	4 SHC	
PHY 110 and PHY 110A	3 SHC and 1 SHC	Conceptual Physics and Conceptual Physics Lab	PHYS 182/182L General Physics II/Lab	4 SHC	
PHY 151 and PHY 152	4 SHC and 4 SHC	College Physics I and College Physics II	PHYS 191/Lab University Physics I and PHYS 192/Lab University Physics II	4 SHC and 4 SHC	
PHY 251	4 SHC	General Physics I	PHYS 181/181L General Physics I/Lab	4 SHC	
PHY 252	4 SHC	General Physics II	PHYS 182/182L General Physics II/Lab	4 SHC	
CHM 151	4 SHC	General Chemistry I	CHEM 101 and 101/Lab	4 SHC	
CHM 152	4 SHC	General Chemistry II	CHEM 102 and 102/Lab	4 SHC	
Total UGETC Hours	40 SHC				
Additional GE Courses	8 SHC				
PE	1 SHC	Physical Activity	Physical Activity	1 SHC	Required by Gen. Ed.
HEA 110	3 SHC	Personal Health and Wellness	HLTH 185 Health Concepts	2 SHC	Required by Gen. Ed.
PHY 251	4 SHC	General Physics I/Lab	PHYS 181/181L General Physics 1 and Lab	4 SHC	Required by Major.

<i>Total General Education Hours Required</i>	<u>48</u> SHC				
<u>Other Required Hours</u>	<u>11</u> SHC				
CHM 151	4 SHC	General Chemistry I	CHEM 101/101L	4 SHC	Pre-Major Requirement.
CHM 152	4 SHC	General Chemistry II	CHEM 102/102L	4 SHC	Pre-Major Requirement.
	3 SHC	Chemistry Elective	Chemistry Elective	3 SHC	Pre-Major Requirement.
<u>Academic Transition</u>	<u>1</u> SHC	<i>The following course is required.</i>			
ACA 122	1 SHC	College Transfer Course	UNIV 122 Freshman Seminar	1 SHC	Required by Gen. Ed.
<i>Total Semester Hours in Program</i>	<u>60</u> SHC				

The Junior and Senior years will be completed at Elizabeth City State University.

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			<i>Semester 5: (16 credit hours)</i>		
			PHYS 192/182L General Physics II	4 SHC	Major Requirement.
			MATH 265 Calculus II	4 SHC	Major Requirement. (Pre-requisite for Major Course Requirement).
			CHEM 301/301L Organic Chemistry I/Lab	4 SHC	Major Requirement.
			CHEM 205/205L Inorganic Chemistry/Lab	4 SHC	Major Requirement.
			<i>Semester 6: (15 credit hours)</i>		
			CHEM 202/202L Analytical Chemistry I /Lab	4SHC	Major Requirement.
			CHEM 302/302L Organic Chemistry II/Lab	4 SHC	Major Requirement.
			CHEM 401/401L Biochemistry I/Lab	4 SHC	Major Requirement.
			CHEM 200 Additional Topics in General Chemistry	3 SHC	Major Requirement.
			<i>Semester 7: (15 credit hours)</i>		
			CHEM 203/203L Analytical CHEM II	4 SHC	Major Requirement.
			CHEM 405 Instrumental Methods	4 SHC	Major Requirement.
			Free Electives	7 SHC	

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			<i>Semester 8: (14 credit hours)</i>		
			CHEM 403/403L Physical Chemistry I/Lab	4 SHC	Major Requirement.
			CHEM 499 Chemical Research	2 SHC	Major Requirement.
			CHEM 450 Chemistry: An Integrated App.	3 SHC	Major Requirement.
			CHEM 300/400 Elective	4 SHC	Major Requirement.
			CHEM 350 Chemistry Seminar	1 SHC	Major Requirement.
			<u>Total ECSU Semester Credit Hours Completed</u>	<u>60 SHC</u>	
			<u>Total Semester Credit Hours Completed for Degree</u>	<u>120 SHC</u>	
			Reviewed by: Dr. Tesfaye Serbessa		
			Dr. Gloria E. Payne		Approved 02/06/2018