



# ELIZABETH CITY STATE UNIVERSITY

## Curriculum Guide for Bachelor of Science Degree: Pharmaceutical Science

ASSOCIATE OF ARTS DEGREE: Universal General Education Transfer 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>
<b><u>English Composition</u></b>	<b><u>6 SHC</u></b>	<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.
<b><u>Social/ Behavioral Science</u></b>	<b><u>9 SHC</u></b>	<i>Select three courses from the following from at least two different disciplines.</i>			
HIS 111	3 SHC	World Civilization I	HIST 140 World Civ. I	3 SHC	Must Complete HIST 140 or HIST 141 Required by General Ed.
HIS 112	3 SHC	World Civilization II	HIST 141 World Civ. II	3 SHC	
HIS 131	3 SHC	American History I	HIST 255 American History to 1877	3 SHC	

HIS 132	3 SHC	American History II	HIST 256 American History Since 1877	3 SHC	
ECO 251	3 SHC	Principles of Microeconomics	ECON 201 Prin. of Econ. I	3 SHC	Required by Major. Required by Major.
ECO 252	3 SHC	Principles of Macroeconomics	ECON 202 Prin. of Econ. II	3 SHC	
POL 120	3 SHC	American Government	POLS 298 American National Government	3 SHC	
PSY 150	3 SHC	General Psychology	PSY 212 General Psychology	3 SHC	
SOC 210	3 SHC	Intro to Sociology	SOC 201 Intro. to Sociology	3 SHC	
<b><u>Humanities/Fine Arts</u></b>	<b><u>9 SHC</u></b>	<i>Select three 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. (Take either ART 111 or MUS 110) 1 semester hour used as an elective.  Required by Major.  Required by Major. ( Take either ART 111 or MUS 110) 1 semester hour used as an elective.
<u>Humanities/Fine Arts</u> ART 111	3 SHC	Art Appreciation	ART 130 Art Appreciation	2 SHC	
ART 114	3 SHC	Art History Survey I			
ART 115	3 SHC	Art History Survey II			
ENG 231	3 SHC	American Literature I	ENGL 201 World Literature I	3 SHC	
ENG 232	3 SHC	American Literature II	ENGL 202 World Literature II	3 SHC	
MUS 110	3 SHC	Music Appreciation	MUS 135 Intro. to Music	2 SHC	
MUS 112	3 SHC	Introduction to Jazz			
PHI 215	3 SHC	Philosophical Issues	Social/Behavioral Science Elective	3 SHC	
PHI 240	3 SHC	Introduction to Ethics	BUAD 240 Ethics	3 SHC	

<b>Mathematics</b>	<b>3-4 SHC</b>	<i>Select one course from the following.</i>			
MAT 143	3 SHC	Quantitative Literacy	MATH 114 Mathematics for Liberal Arts	3 SHC	
MAT 152	4 SHC	Statistical Methods I	STAT 251 Basic Statistics	3 SHC	Required by Major. 1 hr. used as an elective.
MAT 171	4 SHC	Pre-calculus Algebra	MATH 115 College Algebra	3 SHC	1 hr. used as an elective.
MAT 271	4 SHC	Calculus I	MATH 165 Calculus of Single Variable I	4 SHC	Required by Major.
<b>Nat. Sciences</b>	<b>4 SHC</b>	<i>(Select one course)</i>			
AST 111/111A	4 SHC	Descriptive Astronomy I/Lab	Natural Science Elective	4 SHC	
AST 151/151A	4 SHC	General Astronomy I/Lab	Natural Science Elective	4 SHC	
BIO 110	4 SHC	Principles of Biology	BIOL 155/155L Principles of Biological Science/Lab	4 SHC	
BIO 111	4 SHC	General Biology I	BIOL 101/101L General Biology for Majors/Lab	4 SHC	
CHM 151	4 SHC	General Chemistry I	CHEM 101/101/L General Chemistry/Lab	4 SHC	Required by Major.
GEL 111	4 SHC	Introduction to Geology	Natural Science Elective	4 SHC	
PHY 110/110A	4 SHC	Conceptual Physics and Lab	PHYS 182/182L General Physics II/Lab	4 SHC	
<b>Total UGETC Hours</b>	<b>32 SHC</b>				
<b>Additional GE Courses</b>	<b>11 SHC</b>				
HEA 110	3 SHC	Personal Health & Wellness	HLTH 185 Health Concepts	2 SHC	Required by General Ed. 1 hr. used as an elective.
	1 SHC	Physical Activity	Physical Activity	1 SHC	Required by General Ed.
PHY 251	4 SHC	General Physics I/Lab	PHYS 181/181L General Physics I and Lab	4 SHC	Required by Major.

	3 SHC	Elementary Spanish	SPAN 101 Elementary Spanish	3 SHC	Required by Major.
<b><i>Total General Education Hours Required</i></b>	<b><u>43 SHC</u></b>				
<b><u>Other Required Hours</u></b>	<b><u>16 SHC</u></b>				
BIO 111	4 SHC	General Biology I	BIOL 101/101L General Biology for Majors/Lab	4 SHC	Required by Major.
BIOL 112	4 SHC	General Biology II	BIOL 102/102L General Biology for Majors/Lab	4 SHC	Required by Major.
CHEM 152	4 SHC	General Chemistry II	CHEM 102/102L General Chemistry	4 SHC	Required by Major.
	4 SHC	Anatomy & Physiology I	BIOL 215/215L Anatomy & Physiology	4 SHC	Required by Major.
<b><u>Academic Transition</u></b>	<b><u>1 SHC</u></b>	<i>The following course is required.</i>			
ACA 122	1 SHC	College Transfer Course	UNIV 110 Freshman Seminar I	1 SHC	Required by CAA.
<b><i>Total Semester Hours in Program</i></b>	<b><u>60 SHC</u></b>				

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

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			<i>Semester 5: (16 credit hours)</i>		
			PHSC 200 Foundations of Pharmaceutical Science	3 SHC	Major Requirement.
			BIOL 341 Microbiology	4 SHC	Major Requirement. (Relevant for graduate/Professional Program).
			PHSC 300/400 Level Elective	5 SHC	Major Requirement.
			CHEM 301/L Organic Chemistry I/Lab	4 SHC	Major Requirement. (Pre-requisite for Major Course Requirement).
			<i>Semester 6: (15 credit hours)</i>		
			PHSC 320 Pharmaceutical Analysis/L	4 SHC	Major Requirement.
			PHSC 300 Principles of Pharmacology	3 SHC	Major Requirement.
			CHEM 302/L Organic Chemistry II/Lab	4 SHC	Major Requirement. (Pre-requisite for Major Course Requirement).
			Free Elective	4 SHC	Major Requirement.
			<i>Semester 7: (15 credit hours)</i>		
			CHEM 430 Intro. to Medicinal Chemistry	3 SHC	Major Requirement. (Relevant for graduate/Professional Program).
			CHEM 401L Biochemistry I Lab	1 SHC	Major Requirement.

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			PHSC 421 Methods in Biotechnology/L	4 SHC	Major Requirement.
			PHSC 403 Pharmaceutical Biochemistry I	3 SHC	Major Requirement.
			PHSC 380 Drug Discovery, Development & Design	4 SHC	Major Requirement.
			<i>Semester 8: (14 credit hours)</i>		
			PHSC 499 Capstone Seminar	3 SHC	Major Requirement.
			BIOL 487 Statistical Applications in the Sciences	3 SHC	Major Requirement.
			PHSC 421 Methods in Biotechnology	3 SHC	Major Requirement
			Free Electives	2 SHC	
			PHSC 404 Pharmaceutical Biochemistry II	3 SHC	Major Requirement. (Pre-requisite PHSC 403).
			<b><i>Total ECSU Semester Credit Hours Completed</i></b>	<b>60 SHC</b>	
			<b><i>Total Semester Credit Hours Completed for Degree</i></b>	<b>120 SHC</b>	
			Reviewed by: Dr. Dolapo Adedeji		
			Dr. Gloria E. Payne		Approved 02/06/2018