# Program Map: (ACS Certified) Department of Chemistry and Forensic Science College of Sciences and Technology

SID: Name: Advisor: **Start Date: Catalog Date:** 

1 (662220)		5151					
Start Date:		Ca	atalog Date	Expected Graduation Date:			
		Fall Courses	Fall Courses		Spring Courses	Notes	
	Course	Name	Hours	Course	Name	Hours	Notes
	ENGL 1101*	Composition I	3	ENGL 1102*	Composition II	3	*A grade of a C or better mus
	Core Area A	Pre-requisite:		Core Area A	Pre-requisite: ENGL 1101		be earned for this course
	MATH 1113*	Pre-Calculus	3	MATH 2101*	Calculus I	4	
	Core Area A	Pre-requisite: MATH 1111		Area F	Pre-requisite: MATH 1113		
_	CHEM 1211*	Principles of Chemistry I*	3	CHEM 1212*	Principles of Chemistry II	3	
aI	Area F	Pre-requisite: None		Area F	Pre-requisite: CHEM 1211		
Ē	CHEM 1211L*	Principles of Chemistry I Lab*	1	CHEM 1212L*	Principles of Chemistry II Lab	1	
Freshman	Area F	Pre-requisite: None		Major	Pre-requisite: CHEM 1211		
ess.	BIOL 1107*	Principles of Biology I	3	BIOL 1108*	Principles of Biology II	3	
Ă	Area D	Pre-requisite: None		Area D	Pre-requisite: BIOL 1107		
	BIOL 1107L*	Principles of Biology I Lab	1	BIOL 1108L*	Principles of Biology II Lab	1	
	Area D Lab	Pre-requisite: None		Area D Lab	Pre-requisite: BIOL 1107L		
	COST 1103	COST First Year Experience	2				
	Area F						
	Fall Milestones		Total		Spring Milestones	Total	
			16			15	
			1			1	

	Fall Courses			Spring Courses			Notes
	Course	Name	Hours	Course	Name	Hours	Notes
	MATH 2111*	Calculus II	4	CHEM	Chemistry Research Methods	2	*A grade of a C or better must
	Area F	Pre-requisite: MATH 2101		2601K*	Pre-requisite: CHEM 1212		be earned for this course
				Major			
	HUMN 1201	Critical Thinking & Communication	3	PHYS 2212K*	Principles of Physics II	4	
ره ا	Core Area B			Area D	Pre-requisite: PHYS 2211K		
).	PHYS 2211K*	Principles of Physics I	4	CHEM 2511*	Organic Chemistry II	3	
Ĕ	Area D	Pre-requisite: MATH 2101		Major	Pre-requisite: CHEM 2501		
Sophomore	CHEM 2501*	Organic Chemistry I	3	CHEM	Organic Chemistry II Lab	1	
þ	Major	Pre-requisite: CHEM 1212		2511L*	Pre-requisite: CHEM 2501L		
d				Major			
70	CHEM 2501L*	Organic Chemistry I Lab	1	Area D (non-		3	
<u> </u>	Major	Pre-requisite: CHEM 1212L		lab)*			
	Area E Social Sci.		3	AFRS 1501	Survey of African American	2	
	Option			Core Area B	Experience		
	Fall Milestones		Total		Spring Milestones	Total	
	Student should know their career track.		18	Student should have completed a job shadowing		15	
				experience relevant to their career track			
			i	1		I	1

	Fall Courses			Spring Courses			Notes
	Course	Name	Hours	Course	Name	Hours	Notes
	CHEM 3101K*	Analytical Chemistry	4	CHEM 3411K*	Physical Chemistry II	4	*A grade of a C or better must
	Major	Pre-requisite: CHEM 1212/1212L		Area D	Pre-requisite: CHEM 3401		be earned for this course
	CHEM 3401K*	Physical Chemistry I	4	CHEM 3111K*	Instrumental Analysis	4	
Junior	Major	Pre-requisite: CHEM 1212/1212L		Major	Pre-requisite: CHEM 310K		
	CHEM 3201K*	Inorganic Chemistry	4	MATH 3101*	Linear Algebra	3	1
	Major	Pre-requisite: CHEM 1212/1212L		Major	Pre-requisite: MATH 2111		
	CHEM 3522L*	Advanced Synthesis	2	POLS 1101	American Government	3	
	Major	Pre-requisite: CHEM 2511/2511L		Core Area E			
	HIST 2111 or	U.S. History	3	Core Area C		3	
	2112			Option			
	Student should have completed an internship or research experience relevant to their career track.		17	Students should have completed any required admissions testing for their career track (GRE, MCAT, PCAT, DAT)		17	

	Fall Courses			Spring Courses			Notes
	Course	Name	Hours	Course	Name	Hours	Notes
	CHEM 3801*	Biochemistry	3	Area E		3	*A grade of a C or better must
	Major	Pre-requisite: CHEM 2511/BIOL		Social Sci.			be earned for this course
		1108		Option			
	CHEM 3602K*	Research & Internship	2	Core Area C		3	**Some professional
	Major	Pre-requisite: CHEM 2601K;		Option			educational programs may
<u>.</u>		CHEM 2511					need to be completed by the
.0	CHEM 4531*	Advanced Organic Chemistry	3	FSCI 4201*	Drug Abuse & Drug Analysis	3	summer before the senior year.
Senior	Major	Pre-requisite:		Major	Pre-requisite:		D 4: D D
	CHEM 4411*	Advanced Physical Chemistry	3	CHEM	Polymer Chemistry	3	Does this Degree Program Require a Minor? No
	Major	Pre-requisite:		4601*	Pre-requisite:		Require a Willor? No
				Major			Total Hours Required for this
	CHEM 4901*	Chemical Seminar	1				Degree Program: 122
	Major	Pre-requisite: Junior or Senior					Degree Frogram. 122
	Fall Milestones		Total	Spring Milestones		Total	
	Application completed for further professional		12			12	
	educational programs relative to your career track**						

Updated: 10/17/2022

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#### **Core Curriculum (Programmed Preferred Options in Bold)**

#### Area B - Institutional Options 5 hrs

- i. AFRS 1501 Survey of African-American Experience 2 hrs
- ii. HUMN 1201 Critical Thinking & Communication 3 hrs

#### Area C - Humanities/Fine Arts, and Ethics 6 hrs

- 1. Select one of the following:
  - i. ENGL 2111 World Literature I 3 hrs
  - ii. ENGL 2112 World Literature II 3 hrs
  - iii. ENGL 2121 British Literature I 3 hrs
  - iv. ENGL 2122 British Literature II 3 hrs
  - v. ENGL 2131 American Literature I 3 hrs
  - vi. ENGL 2132 American Literature II 3 hrs
  - vii. ENGL 2222 African American Literature 3 hrs
- viii. PHIL 2010 Introduction to Philosophy 3 hrs
- ix. PHIL 2030 Introduction to Ethics 3 hrs
- 2. Select one of the following:
  - i. ARTS 1101 Introduction to Visual Art 3 hrs
  - ii. DNCE 2010 Dance Appreciation 3 hrs
  - iii. ENGL 2521 Introduction to Film 3 hrs
  - iv. HUMN 2011 Humanities 3 hrs
  - v. MUSC 1101 Introduction to Music 3 hrs
  - vi. THEA 2101 Introduction to Theatre 3 hrs

### Area D - Natural Sciences, Math & Technology 19 hrs

- i. BIOL 1107/1107L Principles of Biology I 4 hrs
- ii. BIOL 1108/1108L Principles of Biology II 4 hrs
- iii. PHYS 2211K Principles of Physics I 4 hrs
- iv. PHYS 2212K Principles of Physics II 4 hrs

## And select one of the following:

- v. CSCI 1130 Computer & Its Applications 3 hrs
- vi. CSCI 1301 Computer Science I 3 hrs
- vii. ENVS 1140 Environmental Issues, 3hrs
- viii. FSCI 1101 Intro to Mol. Forensic Sci. 3hrs

#### Area E - Social Science 12 hrs

- 1. POLS 1101 American Government 3 hrs
- 2. Select one of the following:
  - i. HIST 2111 U.S. History to the Post-Civil War Period 3 hrs
  - ii. HIST 2112 U.S. History from the Post-Civil War to Pre 3 hrs
- 3. Select two of the following:
  - AFRS 2000 Introduction to Africana Studies 3 hrs
  - ii. ANTH 1101 Introduction to Anthropology 3 hrs
  - iii. ECON 2105 Principles of Macro-Economics 3 hrs
  - iv. GEOG 1101 Introduction to Human Geography 3 hrs
  - v. HIST 1111 World Hist to Early Modern Times 3 hrs
  - vi. HIST 1112 World History Early Modern Times to Pres 3 hrs
- vii. POLS 2401 Global Issues 3 hrs
- viii. PSYC 1101 Intro to General Psychology 3 hrs
- ix. PSYC 2103 Human Growth & Development 3 hrs
- x. SOCI 1101 Introduction to Sociology 3 hrs
- xi. SOCI 1160 Social Problems 3 hrs

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