Program Map: Forensic Science Concentration in Biology Department of Chemistry and Forensic Science, College of Science and Technology

Name: SID: Advisor: Start Date: Catalog Date: Expected

Start Date: Catalog Date:				Expected Gradua					
	Fall Courses				Spring Courses			Notes : Lists IMPACT Options here	
Course	Name	Hours	Completed	Course	Name	Hours	Completed		
ENGL 1101	Composition I	3		ENGL 1102	Composition II	3		*this course is meant to fulfill the Area	
Area C	Pre-requisite: None			Area C	Pre-requisite: ENGL 1101			IMPACT (indicate course and which	
MATH 1113 ³	Pre-Calculus	3		MATH 2101*	Calculus I	3		requirement it meets	
Area M	Pre-requisite: MATH 1111			Field of Study Area	Pre-requisite: MATH 1113			**this course is meant to fulfill the Area F	
S FSCI 1101	Intro to Molecular Forensic Sci	3		CHEM 1211*	Principles of Chemistry I	3		requirement	
Area T	Pre-requisite: None			Area T	Pre-requisite: placement test			Accumulate maximum of 30 semester hours	
BIOL 1107*	Principles of Biology I	3		CHEM 1211L*	Principles of Chemistry I Lab	1		in your Freshmen Year.	
Area T	Pre-requisite: None			Area T Lab	Pre-requisite: placement test			•	
BIOL 1107L	Principles of Biology I Lab	1		POLS 1101	American Government	3			
Area T Lab	Pre-requisite: None			Area P	Pre-requisite: None				
COST 1103	COST First Year Experience	2		HUMN 1201	Critical Thinking &	3			
Field of Study	Area Pre-requisite: None			Area I	Communication				
	Su								
Students Opti	ons for Summer Courses as available								

		Fall Courses				Spring Courses			Notes: Accumulate maximum of 60 semester
	Course	Name	Hours	Completed	Course	Name	Hours	Completed	hours in your Sophomore Year.
re	Major	Principles of Forensic Science Pre-requisite: CHEM 1211 OR FSCI 1101	3			Intro to Physics or Principles of Physics Pre-requisite: MATH 1113 or MATH 2101	4		Students must take FSCI 3301/3301L to prevent delay in graduation
Sophomore	FSCI 3301L* Major Lab	Principles of Forensic Science Pre-requisite: CHEM 1211 OR FSCI 1101	1		CHEM 2501* Area T	Organic Chemistry I Pre-requisite: CEHM 1212/1212L	3		
	PHYS 1111K* or PHYS 2211K* Area T Lab	Intro to Physics or Principles of Physics Pre-requisite: MATH 1113; MATH 2101	4		CHEM 2501L* Area T Lab	Organic Chemistry ILab Pre-requisite: CEHM 1212/1212L	1		
	CHEM 1212* Major	Principles of Chemistry II Pre-requisite: CHEM 1211/1211L	3		MATH 2111* Major	Calculus II Pre-requisite: MATHJ 2101	4		
		Principles of Chemistry II Lab Pre-requisite: CHEM 1211/1211L	1		AFRS 1501 Area I	Survey of the African American Experience Pre-requisite: None	2		
	Area S Option	Pre-requisite: None	3						
	Suggested Summer Course Options							Total	

		Fall Courses				Spring Courses			Notes	
	Course		Hours	Completed	Course	1 0	Hours	Completed		
	BIOL 1108* Area T	Principles of Biology II Pre-requisite: BIOL 1107/11071	3		FSCI 4101 Major	Personal ID & DNA Analysis Pre-requisite:	3		Apply for graduation.	
	BIOL 1108L* Area T Lab	Principles of Biology II Lab Pre-requisite: BIOL 1107L	1		FSCI 4101L Major	Personal ID & DNA Analysis Lab Pre-requisite:	1		Accumulate maximum of 90 semester hours in your Junior Year.	
or	FSCI 3401* Major	Research or Internship Pre-requisite: FSCI 3301	3		BIOL 3201 Major	Cell Biology Pre-requisite: BIOL 1108	3			
Juni	CHEM 2511* Major	Organic Chemistry II Pre-requisite: CHEM 2501	3		BIOL 3201L Major	Cell Biology Lab Pre-requisite: BIOL 1108	1		Students are encouraged to obtain an internship, which can be used for Major Technical Elective Credit.	
	CHEM 2511L* Major Lab	Organic Chemistry II Lab Pre-requisite: CHEM 2501 L	1		FSCI ELEC* Major	Major Elective Pre-requisite: CHEM 310K	4			
	HIST 2111 or HIST 2112 Area P	U.S. History Pre-requisite: Varies	3		Area S Option	Pre-requisite: None	3			
	Area A Option	Pre-requisite: None	3							
		Sugges	sted Sun	nmer Course	Options			Total		

	Fall Courses				Spring Courses				Notes	
	Course	Name	Hours	Completed	Course	Name	Hours	Completed		
	FSCI 4401* Major	Crime Scene I Pre-requisite: FSCI 3301	2		FSCI 4901 Major	Forensic Science Seminar Pre-requisite: FSCI 3301	1		Student must take the exit exam and interview.	
Senior	FSCI 4201* Major	Drug Abuse & Drug Analysis Pre-requisite: CHEM 2511; BIOL 1108	3		FSCI ELECTIVE* Major		4		Does this Degree Program Require a Minor? No	
	FSCI 4201L* Major	Drug Abuse & Drug Analysis Lab Pre-requisite:	1		FSCI 4402* Major	Crime Scene II Pre-requisite: FSCI 4401	2		Total Hours Required for this Degree	
	MATH 1401* Major	Elementary Statistics Pre-requisite: MATH 1113	3		BIOL 3321 Major	Microbiology Pre-requisite: BIOL 1108	3		Program: <u>120</u>	
	BIOL 3301* Major	Genetics Pre-requisite: BIOL 1108	3		BIOL 3321 Major	Microbiology Pre-requisite: BIOL 1108	1			
	BIOL 3301L* Major	Genetics Lab Pre-requisite: BIOL 1108	1		Area A Option	Humanities & Fine Arts	3			
	FSCI ELEC Major		4							

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Core Curriculum (Programmed Preferred Options in Bold)

Area I - Institutional Options 5 hrs

- AFRS 1501 Survey of African American Experience 2 hrs
- Select one of the following:
 - i. HUMN 1201 Critical Thinking & Communication 3 hrs
 - DATA 1501 Introduction to Data Science 3 hrs ii.
 - POLS 2401 Global Issues 3 hrs iii.
 - AFRS 2000 Introduction to Africana Studies 3 hrs iv.

Area M - Mathematics & Quantitative Skills3 hrs

Select one of the following:

- MATH 1001 Quantitative Reasoning 3hrs i.
- MATH 1111 College Algebra 3hrs ii.
- MATH 1401 Elementary Statistics 3hrs iii.
- iv. MATH 1113 - Pre-Calculus 3hrs

Area P - Social Science 6 hrs

- POLS 1101 American Government 3 hrs
- Select one of the following: 1.
 - HIST 2111 U.S. History to the Post-Civil War Period 3 has i.
- ii. HIST 2112 U.S. History from the Post-Civil War to Pre 3 hrs

Area A – Humanities/Fine Arts, and Ethics 6 hrs

Select two 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
- ENGL 2131 American Literature I 3 hrs v.
- vi. ENGL 2132 American Literature II 3 hrs
- vii. ENGL 2140 - Introduction to African American Literature 3hrs
- viii. ENGL 2521 Introduction to Film 3hrs
- ix. PHIL 2010 Introduction to Philosophy 3 hrs
- х. PHIL 2030 Introduction to Ethics 3 hrs
- xi. ARTS 1101 Introduction to Visual Art 3 hrs
- DNCE 2010 Dance Appreciation 3 hrs xii.
- ENGL 2521 Introduction to Film 3 hrs xiii.
- HUMN 2011 Humanities 3 hrs xiv.
- XV. MUSC 1101 Introduction to Music 3 hrs
- THEA 2101 Introduction to Theatre 3 hrs xvi.

Area C - Communicating in Writing 6 hrs

- ENGL 1101 English Composition I 3 hrs i.
- ii. ENGL 1102 English Composition II 3hrs

Area T - Natural Sciences, Math & Technology 10 hrs

- Select one of the following:
 - i. FSCI 1101 Intro to Molecular Forensic Sci 3 hrs
 - ii. CSCI 1130 Computer Applications 3 hrs
 - iii. CSCI 1301 Computer Science I 3 hrs
 - iv. CILS 1130 - Introduction to Computer Applications 3hrs
 - v. ASTR 1000 - Introduction to the Universe 3hrs
 - ISCI 1101 Integrated Science I 3hrs vi.
 - BIOL 1103 General Biology 3hrs vii.
 - BIOL 1104 Human Biology 3hrs viii.
- DATA 1501 Introduction to Data Science 3 hrs ix
- ENVS 1140 Environmental Issues 3 hrs х.
- FSCI 1101 Introduction to Molecular Forensic Science 3hrs хi.
- MATH 1111 College Algebra 3hrs xii.
- xiii. MATH 1401 - Elementary Statistics 3 hrs
- MATH 1113 Pre-Calculus 3 hrs xiv.
- Select two of the following lab sciences:

v.

- i. BIOL 1103/1103L General Biology 4 hrs
- ii. BIOL 1104/1104L Human Biology 4 hrs
- CHEM 1101K Introductory Chemistry 4hrs iii.
- ISCI 1111K Integrated Science II 4hrs iv. MSCI 1501K - Introduction to Marine Biology 4hrs
- PHSC 1011K Physical Science I 4hrs vi.
- PHSC 1012K Physical Science II 4hrs vii.
- PHYS 1111K Introductory Physics I 4 hrs viii.
- BIOL 1107/1107L Principles of Biology I 4 hrs ix. BIOL 1108/1108L Principles of Biology II 4 hrs
- х. xi. CHEM 1211/1211L Principles of Chemistry I 4 hrs
- xii. CHEM 1212/1212L Principles of Chemistry II 4 hrs

- CISM 1130 Computer Applications 3 hrs xiii.
- ENVS 1140 Environmental Issues 3 hrs xiv.
- XV. BIOL 1107/1107L Principles of Biology I 4 hrs
- BIOL 1108/1108L Principles of Biology II 4 hrs xvi.
- CHEM 1211/1211L Principles of Chemistry 4 hrs xvii.
- CHEM 1212/1212L Principles of Chemistry 4 hrs xviii.
- PHYS 1112K Introductory Physics II 4 hrs xix.
- XX. PHYS 2211K Principles of Physics I 4 hrs
- PHYS 2212K Principles of Physics II 4 hrs xxi.

Area S - Social Science 6 hrs

Select two of the following:

- i. AFRS 2000 Introduction to Africana Studies 3 hrs
- ii. ANTH 1101 Introduction to Anthropology 3 hrs
- ECON 2105 Principles of Macro-Economics 3 hrs iii.
- iv. GEOG 1101 Introduction to Human Geography 3 hrs
- HIST 1111 World Hist to Early Modern Times 3 hrs v.
- HIST 1112 World History Early Modern Times to Pres 3 hrs vi.
- vii POLS 2401 Global Issues 3 hrs
- viii. PSYC 1101 Intro to General Psychology 3 hrs
- PSYC 2103 Human Growth & Development 3 hrs ix.
- SOCI 1101 Introduction to Sociology 3 hrs х.
- xi. SOCI 1160 Social Problems 3 hrs

Forensic Science Major Electives (9 HRS)

Select from the following:

ARTS 3212	Forensic Photography	3 credits
BIOL 4201	Toxicology	3 credits
BIOL 4301/4301L	Biotechnology an Overview / Lab	3/1 credits
BIOL 4411/4411L	Genetic Engineering Technology I / Lab	3/1 credits
BIOL 4412/4412L	Genetic Engineering Technology II / Lab	3/1 credits
CHEM 3101K	Analytical Chemistry	4 credits
CHEM 3111K	Instrumental Analysis	4 credits
CHEM 3411K	Physical Chemistry II	4 credits
CHEM 3522L	Advanced Synthesis Laboratory	2 credits
CHEM 3801	Biochemistry	3 credits
CHEM 4211	Advanced Inorganic Chemistry	3 credits
CHEM 4531	Advanced Organic Chemistry	3 credits
FSCI 3001	Computer Forensics	3 credits
FSCI 3201	Forensic Evidence in Law Enforcement	3 credits
ESCI 4501	Forensic Evidence – Case Studies	3 credits

Forensic Science Concentration in Biology

The Bachelor of Science degree in Forensic Science is a four-year program with two concentrations: Forensic Chemistry and Forensic Biology. The development of a Forensic Science degree program is interdisciplinary and relies strongly on the incorporation of courses in the College of Science and Technology and the College of Liberal Arts and Social Sciences. Forensic Science spans a wide spectrum of scientific disciplines including chemistry, biology, odontology, pathology, criminalistics, engineering, psychiatry, toxicology, computer science and behavioral sciences, to mention a few. This program is designed to produce well-informed graduates with the option to further their scientific interests in graduate school as well as pursue a career in law enforcement. The major tracks are summarized below:

Forensic Biology - Prepare students for positions in local, state, federal and private forensic science laboratories as deoxyribonucleic acid (DNA) analysts or applicable biological science. This concentration will also prepare students for graduate work in Forensic Science or Biology disciplines.