Forensic Science - Forensic Investigation Emphasis, B.S

The Forensic Investigation Emphasis within the BS in Forensic Science provides an interdisciplinary program that prepares students for public, state, and federal careers with needed forensic investigation subject matter expertise and analytical skills. This emphasis exposes students to the wide variety of critically important forensic investigation techniques, which are currently practiced within various forensic service providers and law enforcement agencies. Students are exposed to various techniques such as the identification and proper collection of evidence found at crime scenes, accurate crime scene documentation skills, forensic photography, death investigations, fingerprint processing/examinations, impression evidence/examination, bloodstain pattern analysis, crime scene reconstruction, firearms and tool mark evidence/examination. Students acquire skills such as critical thinking, writing, expert testimony, and analysis techniques specifically tailored for forensic investigation fieldwork. This emphasis provides students with the overall professional skills, work ethic, and demeanor required of forensic investigators.

Matriculation Requirements

Admission to the BS program includes the following requirements:

- 1. Completion of all general education courses.
- 2. Completion of all lower division CJ courses with a B- grade or higher.
- Completion of MATH 1080 (or MATH 1050 and MATH 1060), BIOL 1610, BIOL 1615, CHEM 1210, CHEM 1215, CHEM 1220, 1225, PHYS 2010, PHYS 2015 with a B- grade or higher.
- 4. Overall GPA of 2.7 or higher.
- 5. Application for admission to BS Forensic Science program.
- 6. Two academic letters of recommendation.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		125
Forensic Science Require	ements	74 Credits
Complete the requirements	3	74
Emphasis Requirements		51 Credits
Complete one of the Follow	ving:	3
ZOOL 1090	Introduction to Human Anatomy and Physiology BB (3)	
ZOOL 2320 & ZOOL 2325	Human Anatomy and Human Anatomy Laboratory (4)	
Complete the Following:		
CJ 1340	Criminal Investigations	3
FSCI 3300	Forensic Photography	3
FSCI 3700	Fingerprint Processing	3
FSCI 3720	Fingerprint Examination	3
FSCI 3780	Bloodstain Pattern Analysis	3
FSCI 3830	Complex Scene Analysis and Reconstruction WE	3
FSCI 4100	Forensic Pathology	3
FSCI 4200	Medicolegal Death Investigations	3
Complete one of the follow	ing as a Capstone Experience	3
FSCI 481R	Forensic Science Internship (3)	
FSCI 489R	Research in Forensic Investigations (3)	
FSCI 4990	Forensic Investigation Capstone (3)	
FSCI 491R	Directed Reading and Special Projects (3)	
Emphasis Electives		
Complete 21 Credits from t	the Following (two courses must be upper division):	21
FSCI 3500	Footwear and Tire Mark Evidence and Examination (3)	

FSCI 3540	Forensic Trace Analysis (3)	
FSCI 3550	Forensic Trace Analysis II (3)	
FSCI 3600	Forensic Anthropology I (3)	
FSCI 3850	Marijuana Identification Certificate (3)	
FSCI 4000	Firearms Examination (3)	
FSCI 4050	Forensic Approaches to Cold Case Investigations (3)	
FSCI 4300	Forensic Genealogy (3)	
FSCI 4320	Genealogy Research Methods and Standards (3)	
FSCI 4350	Forensic Genealogy Seminar (3)	
FSCI 475R	Current Topics in Forensic Science (3)	
FSCI 491R	Directed Reading and Special Projects (1-9)	
CHEM 2310	Organic Chemistry I (4)	
CHEM 2315	Organic Chemistry I Laboratory (1)	
CHEM 2320	Organic Chemistry II (4)	
CHEM 2325	Organic Chemistry II Laboratory (1)	
CHEM 3600	Biological Chemistry (3)	
CHEM 3000	Analytical Chemistry (2)	
BIOL 3550	Molecular Biology (3)	
BIOL 3555	Experiments in Molecular Biology (1)	
CHEM 3005	Analytical Chemistry Laboratory (2)	
CHEM 3605	Biological Chemistry Lab (1)	
CHEM 4000	Instrumental Analysis WE (2)	
CHEM 4005	Instrumental Analysis Laboratory (2)	
ENGL 3300	Collaborative Communication for Technology Professions (3)	
CJ 470G	Comparative Criminal Justice Systems GI (3)	
Any Upper Division CJ Course or Approved Elective		

Core Requirements

Code	Title	Credit Hours
Total Credit Hours		74
General Education Requir	rements	40
		Credits
ENGL 1010	Introduction to Academic Writing CC	3
or ENGH 1005	Literacies and Composition Across Contexts CC	
ENGL 2010	Intermediate Academic Writing CC	3
Complete one of the following	ng:	
MATH 1080	Precalculus QL (MATH 1050 and MATH 1060 will also fulfill this requirement) $^{ m 1}$	5
Complete one of the following	ng:	3
HIST 1700	American Civilization AS (3)	
HIST 1740	US Economic History AS (3)	
HIST 2700	US History to 1877 AS	
& HIST 2710	and US History since 1877 AS (6)	
POLS 1000	American Heritage AS (3)	
POLS 1100	American National Government AS (3)	
PHIL 205G	Ethics and Values IH GI	3
HLTH 1100	Personal Health and Wellness TE	2
or EXSC 1097	Fitness for Life TE	
Distribution Courses:		
BIOL 1610	College Biology I BB	4
CHEM 1210	Principles of Chemistry I PP	4
PHYS 2010	College Physics I PP	4

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CJ 1010	Introduction to Criminal Justice SS	3
Humanities Distribution ¹		3
Fine Arts Distribution ²		3
Discipline Core Requirem	nents	34
		Credits
Forensic Science Foundation	onal Courses:	
CJ 1330	Criminal Law	3
CJ 1350	Introduction to Forensic Science	3
CJ 2350	Laws of Evidence	3
BIOL 1615	College Biology I Laboratory	1
CHEM 1215	Principles of Chemistry I Laboratory	1
CHEM 1220	Principles of Chemistry II PP	4
CHEM 1225	Principles of Chemistry II Laboratory	1
PHYS 2015	College Physics I Lab	1
PHYS 2020	College Physics II PP	4

PHYS 2025	College Physics II Lab
FSCI 3400	Criminalistics
FSCI 3820	Crime Scene Investigation Techniques I WE
FSCI 3860	Forensic Microscopy
FSCI 3880	Forensic Experts/Professional Practices and the Legal System
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COMM 1020 Public Speaking HH Recommended

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ART 1050 Photography I FF Recommended

Graduation Requirements

- 1. Completion of a minimum of 125 or more semester credits; 40 credits of which, must be upper division.
- 2. A minimum grade of B- or higher is required in all Math, Chemistry, Biology, Physics and FSCI Courses with an overall GPA of 3.0 to graduate.
- 3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
- 4. Completion of GE and specified departmental requirements.
- 5. Successful completion of at least one Global/Intercultural course.
- 6. Successful completion of two Writing Enriched courses.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/ or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http:// www.uvu.edu/wolverinetrack/).

	Credit Hours	16
BIOL 1615	College Biology I Laboratory	1
BIOL 1610	College Biology I BB	4
CJ 1330	Criminal Law	3
MATH 1080	Precalculus QL	5
ENGL 2010	Intermediate Academic Writing CC	3
Semester 2		
	Credit Hours	15
COMM 1020	Public Speaking HH (Recommended)	3
CJ 1350	Introduction to Forensic Science	3
CJ 1010	Introduction to Criminal Justice SS	3
American Institutions Course		3
or ENGH 1005	or Literacies and Composition Across Contexts CC	
ENGL 1010	Introduction to Academic Writing CC	3
Semester 1		Credit Hours
First Year		

Second Year

	Total Credit Hours	125
	Credit Hours	12
FSCI Elective or Capstone Experience		3
FSCI 4200	Medicolegal Death Investigations	3
FSCI 3880	Forensic Experts/Professional Practices and the Legal System	3
FSCI 3860	Forensic Microscopy	3
Semester 9		12
	Credit Hours	12
FSCI elective		3
FSCI Elective or Capstone Experience		3
FSCI 4100	Forensic Pathology	3
FSCI 3830	Complex Scene Analysis and Reconstruction WE	3
Fourth Year Semester 8		
Fourth Mana	Credit Hours	12
FSCI Elective		3
FSCI Elective		3
FSCI Elective		3
FSCI 3720	Fingerprint Examination	3
Semester 7		
	Credit Hours	12
FSCI Elective		3
FSCI 3400	Criminalistics	3
FSCI 3700	Fingerprint Processing	3
FSCI 3820	Crime Scene Investigation Techniques I WE	3
Semester 6		
	Credit Hours	14
FSCI Elective		3
PHYS 2025	College Physics II Lab	1
PHYS 2020	College Physics II PP	4
FSCI 3780	Bloodstain Pattern Analysis	3
FSCI 3300	Forensic Photography	3
Semester 5		
Third Year		
	Credit Hours	16
PHIL 205G	Ethics and Values IH GI	3
PHYS 2015	College Physics I Lab	1
PHYS 2010	College Physics I PP	4
CHEM 1225	Principles of Chemistry II Laboratory	1
CHEM 1220	Principles of Chemistry II PP	4
CJ 2350	Laws of Evidence	3
Semester 4		
	Credit Hours	16
CJ 1340	Criminal Investigations	3
ZOOL 1090	Introduction to Human Anatomy and Physiology BB	3
CHEM 1215	Principles of Chemistry I Laboratory	1
CHEM 1210	Principles of Chemistry I PP	4
HLTH 1100	Personal Health and Wellness TE	2
ART 1050	Photography I FF (Recommended)	3
Semester 3		

Program Learning Outcomes

- 1. Conduct proper crime scene documentation procedures, which include notes, sketching, photography, crime scene reporting, evidence collection and packaging.
- 2. Identify physical evidence commonly encountered at crime scenes using various techniques from visual identification, alternate light source, chemical enhancements, and microscopy.
- 3. Analyze principles of biology, chemistry, physics, and mathematics as they pertain to forensic science.
- 4. Scientifically analyze evidence used in criminal investigations through presumptive and confirmatory measures.
- 5. Evaluate basic to complex crime scenes through reconstruction and analysis techniques.

- 6. Evaluate proper approaches/techniques for death investigations through trauma analysis, investigative planning, coordination between law enforcement agencies and the medical examiner system.
- 7. Analyze legal considerations of forensic investigative work, including scientific validity, constitutional law, qualifications, requirements, professional practices and ethical skills needed of the forensic expert.