

# Forensic Science - Forensic Investigation Emphasis, B.S

Visit the Forensic Science page (<https://www.uvu.edu/criminaljustice/forensic-science/>) for more information on the program and access to advising.

## Program Description

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 C grade or higher.
3. 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 C 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
<b>Total Credit Hours</b>		<b>124</b>
<b>Forensic Science Requirements</b>		<b>76 Credits</b>
Complete the requirements		76
<b>Emphasis Requirements</b>		<b>48 Credits</b>
Complete one of the Following:		3
ZOOL 1090	Introduction to Human Anatomy and Physiology (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	3
FSCI 3870	Digital Evidence in Forensic Investigations	3
FSCI 4100	Forensic Pathology	3
FSCI 4200	Medicolegal Death Investigations	3
Complete one of the following as a Capstone Experience		3
FSCI 4810R	Forensic Science Internship (3)	
FSCI 4890R	Research in Forensic Investigations (3)	
FSCI 4910R	Directed Reading and Special Projects (3)	

FSCI 4990	Forensic Investigation Capstone (3)
Emphasis Electives	
Complete 15 Credits from the Following (one course must be upper division):	
FSCI 3500	Footwear and Tire Mark Evidence and Examination (3)
FSCI 3540	Forensic Trace Analysis (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 4450	Forensic Serology (3)
FSCI 4500	Forensic Drug Chemistry and Toxicology (3)
FSCI 4600	Forensic DNA Analysis (3)
FSCI 4750R	Current Topics in Forensic Science (3)
FSCI 4910R	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 (2)
CHEM 4005	Instrumental Analysis Laboratory (2)
ENGL 3300	Collaborative Communication for Technology Professions (3)
CJ 4700G	Comparative Criminal Justice Systems (3)
Any Upper Division CJ Course or Approved Elective	

## Core Requirements

Code	Title	Credit Hours
<b>Total Credit Hours</b>		<b>76</b>
<b>General Education Requirements</b>		<b>34 Credits</b>
ENGL 1010 or ENGH 1005	Introduction to Academic Writing Literacies and Composition Across Contexts	3
ENGL 2010	Intermediate Academic Writing	3
Complete one of the following:		
MATH 1080	Precalculus (MATH 1050 and MATH 1060 will also fulfill this requirement) <sup>1</sup>	5
Complete one of the following:		3
HIST 1700	American History (3)	
HIST 1740	US Economic History (3)	
HIST 2700 & HIST 2710	US History to 1877 and US History since 1877 (6)	
POLS 1000	American Heritage (3)	
POLS 1100	American National Government (3)	
Distribution Courses:		

Personal, Professional, and Civic Growth		3
BIOL 1610	College Biology I	4
CHEM 1210	Principles of Chemistry I	4
CJ 1010	Introduction to Criminal Justice	3
Humanities Distribution <sup>1</sup>		3
Fine Arts Distribution <sup>2</sup>		3
<b>Discipline Core Requirements</b>		<b>42</b>
		<b>Credits</b>
Forensic Science Foundational 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	4
CHEM 1225	Principles of Chemistry II Laboratory	1
STAT 2040	Principles of Statistics	4
PHYS 2010	College Physics I	4
PHYS 2015	College Physics I Lab	1
PHYS 2020	College Physics II	4
PHYS 2025	College Physics II Lab	1
FSCI 3400	Criminalistics	3
FSCI 3820	Crime Scene Investigation Techniques I	3
FSCI 3860	Forensic Microscopy	3
FSCI 3880	Forensic Experts/Professional Practices and the Legal System	3

<sup>1</sup> COMM 1020 Public Speaking Recommended

<sup>2</sup> ART 1050 Photography I Recommended

## Graduation Requirements

1. Completion of a minimum of 124 or more semester credits; 40 credits of which, must be upper division.
2. A minimum grade of C or higher is required in all Math, Chemistry, Biology, Physics and FSCI Courses with an overall GPA of 2.7 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/>).

### First Year

Semester 1		Credit Hours
ENGL 1010 or ENGH 1005	Introduction to Academic Writing or Literacies and Composition Across Contexts	3
American Institutions Course		3
CJ 1010	Introduction to Criminal Justice	3
CJ 1350	Introduction to Forensic Science	3
COMM 1020	Public Speaking (Recommended)	3
<b>Credit Hours</b>		<b>15</b>
Semester 2		
ENGL 2010	Intermediate Academic Writing	3
MATH 1080	Precalculus	5
CJ 1330	Criminal Law	3

BIOL 1610	College Biology I	4
BIOL 1615	College Biology I Laboratory	1
<b>Credit Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Semester 3</b>		
ART 1050	Photography I (Recommended)	3
CHEM 1210	Principles of Chemistry I	4
CHEM 1215	Principles of Chemistry I Laboratory	1
ZOOL 1090	Introduction to Human Anatomy and Physiology	3
CJ 1340	Criminal Investigations	3
<b>Credit Hours</b>		<b>14</b>
<b>Semester 4</b>		
CJ 2350	Laws of Evidence	3
CHEM 1220	Principles of Chemistry II	4
CHEM 1225	Principles of Chemistry II Laboratory	1
PHYS 2010	College Physics I	4
PHYS 2015	College Physics I Lab	1
Personal, Professional, and Civic Growth		3
<b>Credit Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Semester 5</b>		
FSCI 3300	Forensic Photography	3
FSCI 3780	Bloodstain Pattern Analysis	3
PHYS 2020	College Physics II	4
PHYS 2025	College Physics II Lab	1
FSCI Elective		3
<b>Credit Hours</b>		<b>14</b>
<b>Semester 6</b>		
FSCI 3820	Crime Scene Investigation Techniques I	3
FSCI 3700	Fingerprint Processing	3
FSCI 3400	Criminalistics	3
STAT 2040	Principles of Statistics	4
<b>Credit Hours</b>		<b>13</b>
<b>Semester 7</b>		
FSCI 3720	Fingerprint Examination	3
FSCI 3870	Digital Evidence in Forensic Investigations	3
FSCI Elective		3
FSCI Elective		3
<b>Credit Hours</b>		<b>12</b>
<b>Fourth Year</b>		
<b>Semester 8</b>		
FSCI 3830	Complex Scene Analysis and Reconstruction	3
FSCI 4100	Forensic Pathology	3
FSCI Elective or Capstone Experience		3
FSCI elective		3
<b>Credit Hours</b>		<b>12</b>
<b>Semester 9</b>		
FSCI 3860	Forensic Microscopy	3
FSCI 3880	Forensic Experts/Professional Practices and the Legal System	3
FSCI 4200	Medicolegal Death Investigations	3
FSCI Elective or Capstone Experience		3
<b>Credit Hours</b>		<b>12</b>
<b>Total Credit Hours</b>		<b>124</b>

## 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.

## **Forensic science technicians**

- Total Positions 18,600
- Field Growth 13.6%
- Median Salary \$64,940
- Average Openings 2.7

## **Criminal justice and law enforcement teachers, postsecondary**

- Total Positions 16,100
- Field Growth 2.9%
- Median Salary \$69,030
- Average Openings 1.3

## **Detectives and criminal investigators**

- Total Positions 113,400
- Field Growth 2.3%
- Median Salary \$91,100
- Average Openings 8.5