

Pre-Forensic and Investigative Science

Degree Awarded

- Associate of Arts

Nature of Program

The associate degree program in pre-forensic and investigative science fulfills the first two years of undergraduate study required for admittance into the Eberly College of Arts and Sciences Forensic and Investigative Science program. Once admitted to the Forensic and Investigative Science program at WVU, students select an emphasis in one of the following: Forensic Biology, Forensic Chemistry, or Forensic Examiner.

Courses within the associates program provide a foundation in biology, chemistry, physics, math and statistics needed to be successful in the Forensic and Investigative Science bachelor program.

Career Opportunities

A bachelor's degree in Forensic Science & Investigation prepares students for opportunities in fields such as Forensic Biology, Forensic Chemistry, or Forensic Examiner. Forensic examiners can be crime scene analysts, latent fingerprint examiners, forensic photographers, evidence technicians, investigators, and law enforcement officers and agents. Working conditions are typically field and/or office-based rather than laboratory-based. Crime scene analysts are often part of major crime scene squads that collect and document evidence, but they rarely participate in the scientific examination of the evidence in the laboratory. Forensic biologists become DNA analysts or enter into graduate work. Forensic DNA work is a laboratory-based profession with employment opportunities in local, state, federal, and private laboratories. Forensic chemists can work in crime labs and/or as an arson analyst and investigators, forensic toxicologists, and trace evidence examiners. Like forensic biologists, forensic chemists may work immediately in a laboratory-based profession with employment opportunities in local, state, federal, and private laboratories or enter into graduate studies. Forensic biologists and chemists typically do not do crime scene work on a routine basis, but may occasionally be called to a scene.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (<http://registrar.wvu.edu/gef>)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

General Education Foundations

F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Skills		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
MATH 155	Calculus 1 (GEF 3)	4
MATH 156	Calculus 2 (GEF 8)	4
STAT 215	Introduction to Probability and Statistics	3
CSAD 270	Effective Public Speaking (GEF 4)	3
WVUE 191	First Year Seminar	1

BIOL 115	Principles of Biology (GEF 8)	4
BIOL 117	Introductory Physiology	4
BIOL 219	The Living Cell	4
CHEM 115	Fundamentals of Chemistry (GEF 2)	4
CHEM 116	Fundamentals of Chemistry (GEF 8)	4
CHEM 233 & CHEM 235	Organic Chemistry and Organic Chemistry Laboratory	4
CHEM 234 & CHEM 236	Organic Chemistry and Organic Chemistry Laboratory	4
PHYS 101 or PHYS 111	Introductory Physics General Physics	4
PHYS 102 or PHYS 112	Introductory Physics General Physics	4
FIS 201	Introduction to Forensic Identification	3
Total Hours		60

Suggested Plan of Study

First Year

Fall	Hours Spring	Hours Summer	Hours
BIOL 115 (GEF 8)	4 BIOL 117	4 STAT 215	3
CHEM 115 (GEF 2)	4 CHEM 116 (GEF 8)	4	
CSAD 270 (GEF 4)	3 ENGL 101 (GEF 1)	3	
MATH 155 (GEF 3)	4 MATH 156 (GEF 8)	4	
WVUE 191	1		
	16	15	3

Second Year

Fall	Hours Spring	Hours
BIOL 219	4 CHEM 234 & CHEM 236	4
CHEM 233 & CHEM 235	4 FIS 201	3
PHYS 101 or 111	4 ENGL 102 (GEF 1) PHYS 102 or 112	3 4
	12	14

Total credit hours: 60

Major Learning Outcomes

PRE-FORENSIC AND INVESTIGATIVE SCIENCE

Upon completion of the associates in pre-forensic and investigative science program, students will be able to:

1. Apply the scientific method to solving problem by formulating a hypothesis, design effective laboratory experiments, perform laboratory experiments, collect and analyze data statistically and graphically, interpret data, arrive at a conclusion, and report their results utilizing scientific writing.
2. Describe the relationship between the structure and function of cells and investigate cellular properties through various laboratory techniques.
3. Use chemical principles and laboratory techniques to describe and analyze the chemical structure and reactivity of organic molecules.
4. Apply for admission into the forensic and investigative science program on the Morgantown campus or an equivalent program.