

Forensic & Investigative Science Program at WVU

The Forensic & Investigative Science undergraduate program at West Virginia University (WVU) was established in 1999 and graduated its first three students in 2001. Interest in the program has increased significantly to the point where it is today one of the largest majors on campus. The program has attracted students from across the country and the world to WVU. We offer three areas of emphasis: Forensic Biology, Forensic Chemistry, and Forensic Examiner. Graduates of the program have been successful obtaining jobs in local, state, and federal crime laboratories. Equally gratifying is the success our graduates have had in continuing their education. Roughly one third of our graduates have enrolled in graduate school (in forensic science, biology, or chemistry), dental, or law school. We have had graduates accepted into medical school as well. Our program is structured to provide students with a solid foundation in science coupled with practical problem solving skills enabling our graduates to pursue a wide variety of career paths.

Students at WVU are admitted as pre-majors into the area of study they wish to pursue. The first two years of our program are virtually identical to what students in biology, chemistry, pharmacy, pre-medical, or pre-dental programs take. At the end of their sophomore year, students apply for acceptance into the major. Applicants must complete an application form, have obtained at least an overall GPA of 2.75, have completed a minimum of 36 hours in math and science, provide three letters of evaluation, and complete a 15-20 minute interview before they are admitted to the major for their last two years of study. Courses taken in the last two years of the program are dependent upon the area of emphasis the student selects.

Students selecting the Forensic Examiner track graduate with at least 16 hours in chemistry, 12 hours in biology, 8 hours in physics, 8 hours in calculus, 3 hours in pharmacy, 3 hours in statistics, and 3 hours in biochemistry for a minimum of 53 hours in math and science. They also complete courses in crime scene investigation (6 hours), fingerprint identification (3 hours), latent fingerprints (3 hours), forensic photography (3 hours), and blood spatter analysis (3 hours). Forensic Chemistry students take the above minimum of math and science plus an additional 15 hours of chemistry and 3 hours of forensic statistics for a total of at least 71 hours in math and science. Students in the Forensic Biology track take the above 53 hour minimum plus an additional 17 to 20 hours of biology (depending upon electives selected), 4 hours in chemistry, and 3 hours in forensic statistics bringing their minimum total of math and science to 77 hours. The majority of students in the Forensic Biology track also obtain a Bachelor of Science (BS) degree in Biology. Similarly, students in the Forensic Chemistry track generally graduate with a BS in Chemistry as well as their BS in Forensic & Investigative Science.

On top of these math and science courses, all of our students take courses in: introduction to forensic science, public speaking, laboratory quality assurance, scientific and technical writing, forensic journal club, law and evidence, court testimony, forensic science capstone, and a summer internship. Most students complete their internships between their junior and senior years. We start the process of placing our students into internships early in the fall semester of their junior year. The vast majority are placed in crime laboratories or law enforcement agencies but a few have also conducted their internships in commercial laboratories that provide various biological and/or chemical testing of samples. We have a full time employee, Dianna Griffin, dedicated to helping the students secure an internship and ensuring that the experience is rewarding for both our students and the host agency. We are very grateful to the forensic community for their support in hosting our students. We consider it to be one of the most important parts of the curriculum. We are always looking for additional internship sites for our students and hope that members of ASCLD can help us provide these opportunities.

Just to illustrate the types of equipment available to our students and the level of support our program has received from WVU, students within the Forensic Biology option will be trained on an ABI 3100 Avant Genetic Analyzer, those in the Forensic Chemistry track can use a new Agilent GC/MS, while those in the Forensic Examiner track have a SAGEM Morpho AFIS machine for their studies.

The Forensic & Investigative Science academic program, housed within the Eberly College of Arts & Sciences at WVU, includes two crime scene houses and, as of November 2004, a new multi-purpose building that will enable two cars to be parked head to tail for instruction in vehicular investigations. When cars are not inside the new facility, it can be used as a

The Chesapeake Examiner

50 seat lecture area. Plans are under way for the renovation of another building on campus, two floors of which will be dedicated to forensic activities. This 15,000-18,000 square foot area will be shared with the Forensic Science Initiative, directed by Max Houck. The Forensic Science Initiative is administered out of the West Virginia University Research Foundation. The Forensic & Investigative Science academic program and the Forensic Science Initiative work closely together with faculty within the academic program conducting research for the Initiative while employees of the Initiative teach classes for the academic program.

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