



B156 Forensic Education Needs for Local and Federal Hiring Managers From Job Applicants

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Learning Overview: The goal of this presentation is to educate academicians who teach in forensic programs what the needs are for the students they produce. Given the abundance of educational options available to students, guidance on what hiring managers are looking for is imperative for successful outcomes for both the applicant and the hiring laboratory.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by informing professors and students interested in forensic careers what skills will be necessary to hone in order to be successfully hired into a forensic laboratory and by providing data to inform the discussion surrounding what the current and future needs of local and federal employers really are, not what they are presumed to be, and to provide real examples of stellar and sub-par applications.

Forensic education programs have burgeoned in the past two decades. Some programs follow guidelines from Forensic Science Education Programs Accreditation Commission (FEPAC). There are also vast pools of educational institutions that adequately educate their students in fundamental sciences, such as chemistry, biology, and physics. Emphasis on specialization at colleges and universities has led institutions to tout more than 100 majors from which to choose.¹ Some newer majors have produced students with solid fundamental science grounding, but have left hiring managers with difficulties in assessing the adequacy of their skill set. Examples of degree programs that may cause forensic hiring managers to pause are majors such as “Applied Chemistry,” “Biotechnology,” “Environmental Toxicology,” “Pharmaceutical Chemistry,” and “Forensic Science,” to name a few. Degree programs often offer internships with real-world lab experience; the degree of relevancy to a forensic laboratory may only be explored during interviews or during a probation period.

In this joint session, representatives from different forensic science educational programs, local and federal hiring managers, as well as representatives of the legal profession and those who educate jurists will provide information and data to fuel discussion of “Are forensic science programs meeting the current and future needs of employers and the criminal justice system?” In this presentation specifically, hiring managers will discuss applicant pools for recent hiring cycles, the number of positions available, and the number of applicants and the number of individuals hired into the laboratory.

Examples from a local and federal laboratory will be thoroughly presented. As an example of job requirements, all entry-level and journey-level criminalists at one local laboratory are required to have graduated “from an accredited college or university with a bachelor’s degree in Criminalistics or a closely related physical or natural science which must include the successful completion of a minimum of seventeen semester (or equivalent quarter) units of chemistry course work. Chemistry coursework must include laboratory and cover general chemistry and organic chemistry.”

Many of the forensic disciplines have specific education requirements. These requirements can be found in various scientific working group recommendations and forensic standards. Applicants need to be cognizant of these requirements to even be considered for positions. Hiring managers will discuss these various specific requirements and examples will be provided.

To fill one vacancy for a journey-level Criminalist II DNA position at a local laboratory, a recruitment produced 17 applications, 14 of which made it from Human Resources (HR) to the laboratory; when reviewing transcripts and experience only 8 were determined to meet minimum qualifications. A separate Criminalist II firearms recruitment to fill four vacancies produced too few candidates at the Criminalist II experience level, thus an entry-level Criminalist I recruitment will be considered.

As another example, a federal laboratory system had 30 forensic chemist vacancies to fill. There were a total of 434 applicants. Of those, only 100 were deemed qualified by HR. After the interview and testing phase, only 15 applicants were chosen.

The education does not stop after making it beyond the interview. A clean background check is required. Accreditation agencies have requirements obliging laboratories to train their scientists on the job to learn the skills and methods in the laboratory. Accreditation requirements state that court testimony training, testing, and monitoring shall occur, emphasizing the important nexus between forensic science and the legal system.² Additionally, forensic standards exist that provide specific requirements for forensic science practitioner training, continuing education, and professional development (e.g., American Society for Testing and Materials [ASTM] E2917). Hiring managers will describe these standards and provide examples.

In order to span the gap between what forensic programs produce, what hiring managers require, and the knowledge scientists must have of courtroom procedures, dialog is imperative so that institutions are aware of the gaps that exist and to appropriately course-correct to produce employable and articulate forensic scientists.

Reference(s):

- ¹ Arizona State, Ohio State, University of Michigan, UC Berkeley, UC Davis, UC Irvine.
- ² ANAB AR 3125 6.2.2.2, 6.2.3.1 and 7.7.1.I.

Forensic Education, Hiring Requirements, Forensic Skills