Criminal Justice PhD Program’s Forensic Science Concentration Professional Development and Ethics Goals:

Description of Professional Development and Ethics Goals:

Two of the goals of the education and training of the doctoral students in forensic science is to first, develop in them a high level of knowledge and skills applicable to an advanced professional position in their field. Secondly, to instill in them a clear and detailed understanding of research ethics and the ethical standards demanded of those who practice in their field and who are very likely to testify in proceedings where in the life or freedom of fellow human beings may be at stake.

The process used to create the forensic science program’s professional development and ethics goals were two fold. The faculty of the program were consulted and their input concerning what professional skills and their level were required above and beyond that of the normal doctoral student but which pertain specifically to forensic scientists were developed. This faculty, in addition to their academic backgrounds, posses many years of professional practice experience. The faculty discussed professional development with a large number of laboratory scientists and forensic laboratory administrators.

The ethical standards that were developed and are stressed to the forensic science students were developed by reviewing a large number of “Codes of Ethics” from various professional organizations as well as reviewing a number of texts on research and forensic science ethics.

Following are a number of the forensic science programs over all learning goals and assessments that are linked to the above stated goals.

**Learning Opportunity:** Students demonstrate the ability to recognize the strengths and weaknesses of different research designs and the data generated by them as applied to the physical forensic sciences that is to be used in the courts and criminal justice system. They will have the ability to analyze and interpret research data and conclusions and be able to function properly in a research facility. Students will be able to read, discuss (orally and in writing) and critique the relevant literature.

**Assessment:** Presentation of student seminars and oral and written reports on scientific seminars attended. Students demonstrate the ability to conduct research with scientific instruments.
**Required Courses:** CRJ 84701 -02 –3 (Seminar Program in Forensic Science, Three Semesters). Students must attend at least five seminars per semester and supply written critiques on each. The student is also required to present seminars on a topic selected by agreement with faculty assigned to the particular class. CRJ 86500 Basic Research Methods for Forensic Science Projects with Research Laboratory Training) and CRJ 86600 (Statistics for Forensic Scientists)

**Learning Opportunity:** Develop knowledge and skill in the student’s selected area of physical science specialization that provides a foundation for dissertation research and future academic or professional employment. Explore a variety of specialized topics and methodologies that are an integral part of an advanced student’s mastery of complex scientific materials.

**Assessment:** Complete elective courses.

**Elective Courses:** Students choose doctoral-level elective courses in subjects related to the physical sciences utilized in the forensic setting. These are available within the criminal justice program as well as in the doctoral programs in chemistry, physics, biology, biochemistry and earth and environmental sciences, these are offered in the appropriate departments of the CUNY Graduate Center, or in courses from the consortium of doctoral programs of other universities located in the New York City metropolitan area. Students are strongly encouraged to complete an elective course CRJ 84900 Scientific Evidence, Expert Testimony, Forensic Science and Research Ethics taught in the program.

**Learning Opportunity:** A series of professional development seminars applicable to the forensic science doctoral students are offered each year at the Graduate Center by the various physical science departments and during the year by the Science Department at John Jay College. Students are strongly encouraged to avail themselves of these opportunities to enrich their understanding of the diverse physical sciences. During the students first year and until he has selected a dissertation mentor and committee, the student will be advised by the Forensic Science Program Director. Subsequently, students are mentored by their dissertation advisor and members of the dissertation committee.

**Assessment:** Student’s as part of their required core curriculum attend at least five seminars per three semester sequence and are required to write a review of the seminars they attended. Students are evaluated on their ability to deliver professional seminars as they are required to deliver two seminars as part of two of the three seminar classes. They are also evaluated as part of their second examination wherein they have to deliver two seminars one on their dissertation topic and one on an additional technical topic assigned by their dissertation committee. Students are additionally evaluated on their dissertation defense.
The students’ understanding of ethical issues in research and professional practice are assessed during the elective class CRJ 84900 and during their written responses in parts of their first examination.