MEMORANDUM TO THE FACULTY AND STAFF  
Forensic Science Program (FSP)  
Penn State University  

DATE: August 1, 2016  

SUBJECT: Program Evaluation Plan  

The Forensic Science Program (FSP) at Penn State currently offers a Bachelor’s and Master’s degree. These degree programs involve curricula and a programmatic operation that was developed by the forensic science faculty and services approximately 236 students per year. We will evaluate the various elements of the program and make any necessary changes to improve quality. The following are some mechanisms and tools we will use to perform our evaluations.

1. **Either weekly, Bi-weekly or monthly faculty/staff meetings** will be held during the academic year, and will serve as an opportunity to address ad hoc and ongoing topics of interest/need regarding improvements to the FSP. Minutes will be captured by a staff member and circulated via email to reflect assignments and outcomes.

2. **Student Rating of Teaching Effectiveness (SRTE) surveys** will be used by individual faculty members to make improvements to their courses on a per semester basis. The STRE results will be provided to the Director of the FSP, Head of the Biochemistry and Molecular Biology (BMB) department and the Dean of the College of Science for their review. The Director, the head of BMB and/or the Dean will only intervene in the evaluation process when scores or feedback are below acceptable levels; for example, an average of 4.5 or lower out of 7.0 on SRTE scores or consistently poor feedback provided by the students in written format. The Director of the FSP will work with the faculty and offer direction. The head of BMB and the Dean will be notified when additional resources or support is needed. The FSP Director and the head of BMB will also recognize the faculty members who score exceptionally high on their SRTE survey results and they would request that the faculty be formally recognized for their efforts. The STRE results are considered confidential, and can only be released with approval from individual faculty members.

Each faculty member will submit Faculty Activity Report at the end of each academic year. Faculty members in FSP will be evaluated jointly by the head of BMB and the Director of FSP. These evaluations will take into consideration their teaching, SRTE scores, scholarship, and research.
3. **Learning Objective surveys** will be used by individual faculty members to make improvements to their courses on a per semester basis. These objectives are included in each course syllabus and will be included in the syllabus for new courses that are being developed. This will help assess how well the learning objectives are being addressed in each course. The learning objectives must be a part of the course syllabus, and must align with at least one of the applicable FSP learning objectives.

**Program Learning Objectives:**

a. Students will develop a strong scientific foundation through entry-level, intermediate and advanced-level courses taught within the College of Science, and through intermediate and advanced-level courses taught within the FSP; primarily through FRNSC 100, 200, 210, BMB 400, CHEM 425 and FRNSC 410, 411, 413, 415, 475, 532, 541, 561, 485, 801 and 894.

b. Students will develop a strong understanding of crime scene investigation, reconstruction, evidence collection and preservation; primarily through FRNSC 200, 210, 410, and 415 which will be reinforced through FRNSC 411, 413, 421, 427, 485, 801, 821 and 831.

c. Students will receive intensive hands-on training in forensic laboratory analysis; primarily through FRNSC 294, 296, 410, 411, 413, 415, 421, 427, 494, 496, 821 and 831, with forensic laboratory content and/or discussions in BMB 400, FRNSC 210, 475, 541, 532, 561, 485, 801, 894. CHEM 425 is also a foundational course required to be taken by forensic science students.

d. Students will develop strong written communication skills necessary for presentation of their findings in accordance with established professional guidelines; CHEM 425, FRNSC 210, 410, 411, 413, 415, 421, 427, 485, 801, 821 and 831.

e. Students will develop strong knowledge of the aptitude necessary for discussing the scientific method in a laboratory setting and effectively testifying in a court of law, and will develop the basic oral communication skills to effectively testify in a court of law; primarily through FRNSC 400, 421, 427, 475, 485, 541, 801, 821, 831, and 894 with varying levels of oral communication content in all other courses taught by the faculty in the FSP.

f. Students will develop an understanding of the importance of the interaction between law enforcement, scientists and the legal profession; FRNSC 210, 400, 410, 411, 413, 415, 421, 427, 532, 821 and 831, with some content in 485 and 801.

g. Students will develop an appreciation for the importance of professionalism in the forensic science community and how to conduct themselves in an ethical manner;
primarily through FRNSC 561, with elements addressed in FRNSC 210, 400, 410, 413, 415, 421, 427, 485, 801, 821, 831, and PSU 016.

h. Students will learn about Quality Assurance in classes such as FRNSC 410, 411, 413, 415, 421, 427, 541, 485, 801, 821, 831 and in CHEM 425.

4. **Forensic Science Aptitude Test (FSAT) scores**, captured during the capstone experiences (i.e., FRNSC 485 and 801) and received from the American Board of Criminalists following each semester, will be used to assess the effectiveness of the FSP in preparing our graduates for a career in the forensic sciences. The entire faculty will be involved in the assessment process, which will be conducted through meetings and email forums. Changes to the curriculum and/or program will be made when necessary. The capstone experiences can also be used to assess the preparation of individual students. This latter assessment will be made by the instructors teaching the course.

5. **Exit Questionnaires** completed by students immediately prior to graduation will be used to assess the quality of the FSP, including areas of potential improvement. A formal evaluation of the results will be completed by the Director of FSP, Head of BMB, and a discussion of the results will be conducted through an open email forum between all faculty members and at applicable faculty/staff meetings.

6. **Employer Satisfaction Surveys** will be used to assess whether our graduates are well prepared to enter a career in the sciences (especially forensic science), and are having positive interactions with employers. Those students that go on to other colleges and universities to earn higher degrees will not be included in this process, as the time between graduation from the next level and job placement could have unknown effects on the survey results. Job placement statistics will be used to monitor where our graduates are finding jobs, and allow us to track their progress so that the employer satisfaction surveys can be sent out ~6 months from the time of employment. The Director of the FSP will complete an assessment of the survey results on an annual basis. Discussion of the results will be conducted through an open email forum between all faculty members and at applicable faculty/staff meetings.