

UNIVERSITY OF WINDSOR
UNIVERSITY PROGRAM REVIEW (UPR)
FINAL ASSESSMENT REPORT AND IMPLEMENTATION PLAN: FORENSICS PROGRAMS
UNDERGRADUATE PROGRAMS
January 2022

Executive Summary of the Cyclical Program Review of the Forensics Programs

In accordance with the University's Institutional Quality Assurance Process (IQAP), the Forensics Programs 2019-2020 Self-Study, submitted by the Office of the Dean of Science to the Office of Quality Assurance on April 12, 2021, included: 1) descriptions and an analysis of the programs, their learning outcomes, curriculum structure, and student experience; 2) information on enrolments as well as financial, physical and human resources; and 3) the program data including the standard data package provided by the Office of Quality Assurance. Appended to the Self-Study were course outlines for all forensics courses, the Leddy Library report, and CVs for the full-time faculty members associated with the programs.

The Forensics Programs were reviewed by Tracy Rogers, Forensic Science Program and Department of Anthropology, University of Toronto Mississauga; James Watterson, Department of Forensic Science, Laurentian University; and Cheryl Collier, Dean, Faculty of Arts, Humanities and Social Sciences, University of Windsor. In addition to reviewing the Self-Study, they conducted a two-day virtual site visit on May 26-27, 2021, which included a virtual walk-through tour of the facilities (labs, student spaces, *etc.*) and meetings with faculty, students, staff; the Forensic Science Programs Administrator; the Associate Vice President, Academic; the Associate Dean of Science; and the Dean of Science.

In their report (August 2021), the Review Team provided feedback on the curriculum framework and program learning outcomes, noting that they are appropriate and align to the undergraduate degree level expectations. However, the Review Team raised significant concerns with the admission and program requirements, courses content and delivery mode, lack of faculty expertise, and insufficient human, physical and financial resources and concluded that the BFS and BA in Forensics fall significantly short of the specified curriculum framework and do not meet the stated program learning outcomes. Specifically, the Review Team noted that the curriculum lacks depth, has too much overlap among and between courses, is outdated and lacking in essential concepts and experiential learning opportunities, and is focussed more on crime scene investigation than forensic science. The Review Team noted that a formalized and adequately resourced administrative structure as well as an in-depth curriculum review and mapping exercise, headed by a Director with expertise in forensic science, were needed to make the required changes and to bring the curriculum in line with the current state of the discipline. The Review Team provided specific recommendations with rationale for consideration. Both the Review Team and the Forensics Advisory Committee noted that in the absence of continued necessary resources, the programs should be phased out.

The Forensics Advisory Committee and the Dean of the Faculty submitted their responses to the External Reviewers' Report (November 2021), addressing the recommendations, identifying follow-up actions, and providing clarification or corrections, as appropriate. The Senate Program Development Committee (PDC) Final Assessment Report and Implementation Plan (January 2022) considered all the above documentation. The Executive Summary and Implementation Plan, along with any response from the area on the final recommendations, were submitted to Senate in February 2022.

Final Recommendations and Implementation Plan (in priority order)

Final recommendations were arrived at by the Program Development Committee, following a review and assessment of the External Reviewers report, the response from the Forensics Advisory Committee, and the Dean's response.

Recommendation 1: That the Program Area make a case to the Dean of the Faculty for additional faculty and staff appointments in the form of:

- A tenured or tenure-track forensic biologist, forensic chemist or forensic toxicologist with a record of forensic research and forensic casework to ensure that students are learning state of the art methods, knowledge, and skills.
- A tenured or tenure-track faculty member with established experience in forensic chemistry/toxicology or forensic DNA analysis as well as experience in forensic casework to ensure that students are learning state of the art methods, knowledge, and skills.
- A staff member to support the Forensic Science Program and assist the Director with student advising, recruiting mentors and placing students, inventorying and ordering supplies, supporting faculty, *etc.*

Agents: Program Administrator, Forensics Advisory Committee, Dean of the Faculty

Completion by: Fall 2023

Recommendation 2: That a Director of the Forensic Science Program be appointed with forensic expertise and the academic experience necessary to properly restructure the program and curriculum, and to ensure that all subsequent hires (tenure-track, teaching, or sessional) have the necessary knowledge to contribute effectively to the program.

Because it will take time to hire a new Director, that the current Program Administrator be encouraged to remain for the short to medium term, as she has been key to curricular reorganization and student advising to date and can help the program bridge the gap.

Agents: Program Administrator, Forensics Advisory Committee, Dean of the Faculty

Completion by: Fall 2023

Recommendation 3: That the Program Area, under the direction of the new Director, undertake a complete curriculum review and mapping exercise which, at minimum, addresses the following:

- (a) Define the rationale for each BFS program concentration, renaming the concentrations as needed, and restructuring the course requirements of the concentrations to better align with professional standards and expectations.
- (b) Immediately eliminate all of the courses that overlap, are too broad in scope and lack depth, or are outdated. As a guideline, the following courses should be eliminated and replaced with courses in forensic biology and forensic chemistry/forensic toxicology to be taught by the recommended new faculty: FRSC-2100. Crime Scene Evidence Analysis, FRSC-3101. Laboratory in Forensic Science, FRSC-4207. New Perspectives in Forensic Evidence Analysis, FRSC-4217. Advances in Human Identification, FRSC-4227. Forensic Medicine: Toxins and Pathology, FRSC-4237. Bioterrorism, Food and Environmental Forensics.
- (c) For the BFS program, reduce reliance on courses taught online and implement more laboratory-based courses. *[Online courses do provide a broad view suitable for students in the BA in Forensics, the certificate, and 2+2 programs.]*
- (d) Consider having the recommended new faculty develop additional courses that address more broadly applicable aspects of forensic science, (e.g. ethics, resiliency, lab accreditation, quality assurance, *etc.*)
- (e) Redesign the Practicum course (FRSC-4002) and the Thesis course FRSC-4900 to meet the FEPAC accreditation requirements for the capstone experience. In order to meet FEPAC capstone requirements, program requirements could be changed to allow students to take *either* the revised Practicum course or the revised Thesis course.
- (f) Explore whether CHEM-2310 (rather than, or in addition to, BIOC 2010) should be added to the BFS program requirements. (currently, the BFS program requires two organic chemistry courses with laboratory instruction, CHEM 2300 and BIOC 2010.)
- (g) Either make SPH4U a requirement for entrance to the programs or create a Physics introductory bridge course (equivalent to MATH-1780 Access to Differential Calculus, BIOM-1003 Biology of Organisms, or BIOL-1013

Organisms and the Environment) which students would be required to take in their first year, to ensure that students are adequately prepared for university level physics courses.

- (h) Submit learning outcomes and assessment methods for FRSC-2007. Introduction to Forensic Science that clearly correspond to the University's stated "Characteristics of a University of Windsor Graduate". *[PDC notes that learning outcomes for all of its programs and other courses have been submitted. As well, with the deletion of FRSC-3101. Laboratory in Forensic Science, course learning outcomes are not required.]*

Agents: Director, Faculty Advisory Committee, Dean of the Faculty, Centre for Teaching and Learning

Completion by: Fall 2025

Recommendation 4: As the Program Area works on its extensive curriculum review and mapping exercise, that BFS students be given the opportunity to enrol in special topics courses in Forensic Science or to register in forensic science courses at other universities on letters of permission, as a short-term solution to provide students the appropriate content.

Agents: Program Administrator/Director, Faculty Advisory Committee, Dean of the Faculty

Completion by: Fall 2023

Recommendation 5: For courses taught online, that the Program Area report on how instructors are providing opportunities for direct interaction between the instructor and the students, as well as how they are including innovative techniques for remote learning.

Agents: Program Administrator/Director, Faculty Advisory Committee, Dean of the Faculty, Office of Open Learning

Completion by: Fall 2023

Recommendation 6: That efforts be made by the Program Administrator (later the Director) to coordinate course scheduling, particularly in the BA Forensics, to reduce conflicts.

Agents: Program Administrator/Director, Dean of the Faculty

Completion by: Fall 2023