SAINT LOUIS UNIVERSITY

Saint Louis University
Program Assessment Plan

Program (Major, Minor): Forensic Science
Department: Sociology and Anthropology
College/School: Arts and Sciences
Person(s) Responsible for Implementing the Plan: Richard Colignon, Department Chair; Joel Jennings, Undergraduate Director and Mary Vermilion, F.S. Coordinator
Date Submitted: June 23, 2017. Revised and reorganized earlier report.

Program Learning Outcomes	Curriculum Mapping	Assessment Methods	Use of Assessment Data
What do you expect all students who complete the program to know, or be able to do?	*Where is the outcome learned/assessed (courses, internships, student teaching, clinical, etc.)?*	*How do students demonstrate their performance of the program learning outcomes? How does the program measure student performance? Distinguish your direct measures from indirect measures.*	*How does the program use assessment results to recognize success and "close the loop" to inform additional program improvement? How/when is this data shared, and with whom?*

Goal #1: Forensic Science majors will demonstrate a knowledge base of the discipline. Learning Outcomes: a) identify major concepts and their categories of evidence b) identify trends in the field of forensic science. c) identify the scientific and empirical basis of forensic science investigative and analytic methods ~~,~~ Seventy-five percent (75%) of program graduates will evidence Proficiency or Mastery in the Knowledge Base of Forensic Science as demonstrated by performance on the final exams in Forensic Biology, and Chemical Analysis of Crime.	Knowledge and Comprehension: In FRSC 2600 (Survey of Forensic Science), students will learn to recall data/information; interpret instructions and problems; and state a problem in one's own words.	Direct Measures: An assessment committee evaluates assignments/exercises/examinations using a standardized rubric. The results of student performance will be reported to the program director for analysis and recommendations for curriculum and/or assessment revisions. Indirect Measures: In an exit interview (i.e., focus group) with all graduating seniors, where students will be asked to report their perceptions of the degree to which they have met these learning outcomes.	Assessment results will be analyzed annually by the program coordinator and committee of forensic science instructors and recommendations for curriculum, pedagogy and/or assessment revisions will be made to the department chair and faculty.

Goal #2. Forensic Science majors will understand the role of Research Methods in Forensic Science. Learning Outcomes: a) demonstrate an understanding of the chain of custody of artifacts/evidence, b) demonstrate an understanding of the appropriate types and instruments of forensic science analysis, c) demonstrate the correct interpretation of appropriate forensic science evidence.	Analysis: The ability to separate material or concepts into component parts so organizational structure may be understood, and to distinguish facts from inferences are taught in FRSC 2610 (Forensic Biology/lab), FRSC 2620 (Chemical Analysis of Crime/lab), FRSC 4550, and (Crime Scene Investigation/lab). Students in the SOC 4550 (Crime Scene Investigation) course are expected to demonstrate understanding of the chain of custody of artifacts/evidence, types and instruments of analysis, and interpretation of appropriate evidence. These students will complete a graded assignment, based on a rubric, which measures competency in reading and analyzing a crime scene case/report and the ability to clearly communicate written responses to several items that assess critical thinking, including comprehension of the chain of custody, testing, instrumentation, analysis, and evaluation.	Direct Measures: An assessment committee evaluates Capstone papers from a sample of students, using a rubric on a scale of 1-5 (1 = unacceptable, 3 = adequate, 5 = excellent) for each of the learning outcomes. Indirect Measures: In an exit interview (i.e., focus group) with all graduating seniors, we will ask students to report their perceptions of the degree to which they have met these learning outcomes.	An assessment committee will examine assessment data every May. Their report will then be shared with the faculty by email and discussed at department retreat every August. Any changes that are made at the department or instructor levels will be conveyed back to assessment committee. The assessment committee will submit an annual report to the University Assessment Coordinator.

Goal #3: Forensic Science majors will understand the role of Critical Thinking Skills in Forensic Science. Learning Outcomes: a) demonstrate the ability to build a pattern from diverse evidence b) demonstrate the ability to assemble diverse evidence to form a whole c) demonstrate the ability to create a new meaning or structure.	Students in FRSC2610 (Forensic Biolog0,; FRSC 2620 (Chemical Analysis of Crime), FRSC 3280 (Forensic Anthropology), FRSC 3590 (Law and Society), FRSC 4000 (Practicum), and FRSC 4550 (Crime Scene Investigation) learn critical thinking skills and enable students to make judgments about the value of ideas or materials.	Direct Measures: An assessment committee evaluates Capstone papers from a sample of students, using a rubric on a scale of 1-5 (1 = unacceptable, 3 = adequate, 5 = excellent) for each of the learning outcomes. Indirect Measures: In an exit interview (i.e., focus group) with all graduating seniors, we will ask students to report their perceptions of the degree to which they have met these learning outcomes. Indirect Measures: Practicum supervisors (FRSC 4000) will complete evaluation forms on the students working under their supervision. These evaluations include questions involving their perceptions of the student's ability to write and think critically, analyze data, and communicate within the conventions of the discipline.	An assessment committee will examine assessment data every May ~~y/June~~. Their report will then be shared with the faculty by email and discussed at department retreat every August. Any changes that are made at the department or instructor levels will be conveyed back to assessment committee. The assessment committee will submit an annual report to the University Assessment Coordinator.

Goal #4. Forensic Science majors will understand appropriate patterns of Career Planning and Professional Development. Learning Outcomes: a) describe the role of ethical issues inherent in forensic science. b) compare and contrast basic professional orientations; or, identify assumptions in analyses and arguments c) apply ethical standards to examples or situations	Through Crime Scene (FRSC 4550) and the Forensic Science Practicum (FRSC 4000) and other internship and workshop opportunities, students are able to test the knowledge and skills they have attained, including those surrounding professional and ethical issues, through observation and participation in actual forensic contexts and discussions with professionals in the field.	Direct Measures: An assessment committee evaluates samples of student work (papers, essay questions from exams) using a rubric with a scale of 1-5 (1 = unacceptable, 3 = adequate, 5 = excellent) for each of the learning outcomes. Indirect Measures: Senior Exit Focus Groups with graduating seniors will be administered in April to Forensic Science BS majors. The focus groups will assess the student's perceptions of the strengths/weaknesses of the curriculum and instructors, solicit recommendations for existing courses, suggestions for new courses, and how the courses in the program might be better sequenced and integrated.	An assessment committee will examine assessment data every May/June. Their report will then be shared with the faculty by email and discussed at department retreat every August. Any changes that are made at the department or instructor levels will be conveyed back to assessment committee. The assessment committee will submit an annual report to the University Assessment Coordinator.

1. **It is <u>not recomended</u> to try and assess (in depth) all of the program learning outcomes every semester. It is best practice to plan out when each outcome will be assessed and focus on 1 or 2 each semester/academic year. Describe the responsibilities, timeline, and the process for implementing this assessment plan.**

   The program director and the forensic science instructors will discuss assessment results and identify outcomes to be addressed on a rotating basis beginning with learning outcome #1 in year one, learning outcomes #2 and #3 in year two, and completing the cycle with learning outcome #4 in year three. Strengths, weaknesses, opportunities and threats (SWOT analysis) will be identified and recommendations for curriculum, pedagogy and/or assessment revisions will be made to the department chair and faculty on an annual basis. The program director will work with the Department Chair to implement the changes prior to the recurring cycle of courses.

2. **Please explain how these assessment efforts are coordinated with Madrid (courses and/or program)?**

   No courses in this program are taught in Madrid. Thus, this program requires no coordination with the Madrid campus.

3. **The program assessment plan should be developed and approved by all faculty in the department. In addition, the program assessment plan should be developed to include student input and external sources (e.g., national standards, advisory boards, employers, alumni, etc.). Describe the process through which your academic unit created this assessment plan. Include the following:**

   a. Timeline regarding when or how often this plan will be reviewed and revised. (This could be aligned with program review.)

      The Forensic Science major is a new program. The assessment plan will be evaluated on an annual basis by all forensic science faculty members with additional input from any extra-departmental faculty teaching courses in the curriculum.

   b. How students were included in the process and/or how student input was gathered and incorporated into the assessment plan.

      The Forensic Science major is a new program. Student input will be gathered through several direct (Capstone evaluations, internship evaluations, licensure exams, rubrics) as well as indirect measures (exit interviews with graduating seniors, exit surveys asking: How did the program fulfill its objectives and contribute to learning? What most helped them learn? What could be improved? etc.)

c. What external sources were consulted in the development of this assessment plan?

Consultation with Kathleen Thatcher, the University's Assessment Coordinator, a review of FEPAC (Forensic Science Education Program Accreditation Commission) accreditation standards, examination of three other Forensic Science Program learning outcomes (Fayetteville State University, University of Southern Mississippi, San Jose State University), and *Assessment Clear and Simple* (2010) by Barbara E. Walvoord were consulted in preparing this document.

d. Assessment of the manageability of the plan in relation to departmental resources and personnel

The original assessment plan was deemed too abstract in its goals, without student learning outcomes and impractical to implement with many part time instructors. No, revision was forthcoming from program faculty. After soliciting feedback from the forensic science instructors Drs. Colignon and Jennings revised the Assessment Plan to be more practical to implement in the future.

Rubric for Assessing Goal #1

Paper #_____ Last Name_____

1. Does the student demonstrate the ability to describe and identify major concepts and their categories of evidence?

Poor		Adequate		Excellent	
1	2	3	4	5	Not applicable to paper's topic

Comments:

2) Does the student demonstrate the ability to identify trends in the field of forensic science?

Poor		Adequate		Excellent	
1	2	3	4	5	Not applicable to paper's topic

Comments:

3) Does the student demonstrate the ability to identify the scientific and empirical basis of forensic science investigative and analytic methods?

Poor		Adequate		Excellent	
1	2	3	4	5	Not applicable to paper's topic

Comments:

Rubric for Exit Interviews

Structured Exit Interview with Graduating Seniors

Focus group questions.

1. What was the most interesting question on the questionnaire?

2. What was/were you favorite courses in the major?

3. What elective courses would you suggest we create?

4. Weakness in the curriculum—What required courses would you suggest we create?

5. Do you have a sense of the breadth of knowledge of this discipline?

6. Were courses with hands-on-experience helpful?

7. Do you think you received helpful guidance from you mentor?

8. Do you believe you have received sufficient training in social science theories to think and discuss information critically? Ask critical analytic questions about the logic of an argument.

9. Do you believe you have received sufficient training in social science methodology to follow and critique the logic and empirical bases of information presented? Ask questions about the empirical basis of arguments.

10. Other Issues:
    a. Facilities?
    b. Research Experience?
    c. Security issues?

11. What additional questions should we be asking?

Notes on responses:

Graduating Senior Survey: Spring 2017

Contact Information

Name _____

Age _____

Email Address (post- graduation) _____

Permanent mailing address (post-graduation)_____

_____

_____

Major(s) _____

_____

Minor(s) and Certificates_____

_____

Following Graduation

Select one of the following that represents your plans following graduation:

☐ Graduate School ☐ Seeking Employment

☐ Law School ☐ Employment (already obtained)

☐ Medical School ☐ Other _____

1. If you have been accepted into a program of post-graduate education please indicate which institution you will be attending and your program of study (e.g. Saint Louis University, Master's Degree in XXXX) _____
_____
_____

2. If you have been accepted into a program of post-graduate study, have you been awarded any scholarships, fellowships or assistantships? If so, please briefly describe _____
_____
_____
_____

3. If you are planning to seek employment what field and what type of job are you seeking? (i.e. computer programmer with Microsoft). _____
_____
_____

4. If you have already secured employment what is your field of employment (i.e computer programming) and what is your job title (programmer)? For which company or organization will you be working _____
_____
_____

5. Please list any suggestions about how the Department of Sociology and Anthropology could have better prepared you for your post-graduation career plan.
_____
_____
_____
_____
_____

6. Did you do undergraduate research? (circle one) Yes No

7. If yes: Who was your faculty advisor for that research _____?

8. If yes: Please describe your research project(s) _____
_____
_____
_____

9. Did you do a field school or internship/practicum during your undergraduate education at Saint Louis University? (circle one) Yes No

10. If yes: Which field school or internship/practicum (where)?
_____
_____

11. How would you describe your field school/internship/practicum experience?
_____
_____
_____

12. Do you believe that your field school/internship/practicum experience helped prepare you for your post-graduation career plans?_____
_____
_____
_____

13. Did you apply for any post-graduation scholarships (i.e. Fulbright, Marshall)? (Circle One) Yes No

14. If yes, please list which of the scholarships you applied _____
_____
_____

15. Please list your level of success in those applications (i.e. finalist for Fulbright application). _____
_____
_____

<u>Thank you for completing the survey.</u> Your assistance will help the Department of Sociology and Anthropology better assist future students in the program. Please stay in touch with the program in future years and keep us informed as your career advances. Please also keep the Department informed when you change mailing addresses, so we may keep you apprised of the Department's progress.