

ACADEMIC PROGRAM REVIEW

Fairmont State Board of Governors

Program with Special Accreditation Program without Special Accreditation

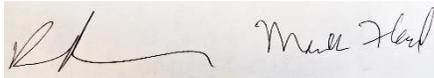
Date Submitted _____

Degree Program B.S. Forensic Science

INSTITUTIONAL RECOMMENDATION Approved by the Board of Governors (§ 5.2.8)

The institution is obligated to recommend continuance or discontinuance of a program and to provide a brief rationale for its recommendation:

- _____ 1. Continuation of the program at the current level of activity;
- X 2. Continuation of program with corrective action (for example, reducing the range of optional tracks or merging programs);
- _____ 3. Identification of the program for further development (for example, providing additional institutional commitment);
- _____ 4. Development of a cooperative program with another institution, or sharing courses, facilities, faculty, and the like;
- _____ 5. Discontinuation of the Program



11/09/2022

Signature of person preparing report:



Date



Date

Signature of Dean



12/08/2022

Signature of Provost and Vice President for Academic Affairs:



Date

04/20/23

Signature of President:



Date

04-24-2023

Signature of Chair, Board of Governors:

Date

Executive Summary for Program Review

Degree Program:	B.S. Forensic Science
College or School/Department:	College of Science and Technology/Natural Sciences
Chair/Program Coordinator	Deb Hemler/Mark Flood
External Reviewer:	Dr. Ken Lang
Reviewer Email:	DrKenLang@outlook.com

A. Synopses of significant findings, including findings of external review (include the external reviewer(s) information).

See synopsis of findings in the appendices

B. Plans for program improvement, including timeline

We currently have a quality program, as will be shown in this program review by the success of our graduates, the accolades the Forensics program has received, and a trend toward increasing enrollment and graduation numbers during the most recent 5 years. The Forensics program will continue to strengthen our efforts to grow our student enrollment and retain our currently enrolled students. We are hopeful that our efforts will allow us to increase enrollment in Intro to Forensic Science, our freshman major course, by 10% per academic year over the next 5 years. We plan to increase enrolment in our freshman course by recruiting forensic majors, advertising our minor, and offering the course as dual enrollment for high schools in West Virginia.

At that level of enrollment growth, over the past 5 years, we consistently see a larger incoming class. Retaining these students and growing our freshman course will give us a larger number of entering majors which will allow for higher enrollments in upper-level elective courses and increase our graduation rates by at least 10% in the next 5 years. We also plan to increase the number of students in the Forensic Investigative Science minor by 10% each year. Growth of the minor may be challenging due to federal laws surrounding student aid which no longer covers courses towards a minor.

C. Identify weaknesses or deficiencies from the previous review and describe how these have been addressed.

From previous 5-year review: Suggested areas that will strengthen our Forensic Science Program:

- Improve Forensic Internship experience

With the addition of Kristy Henson to the Forensic Science program faculty in the fall of 2019, the internship experience has significantly improved. Internships now require multi-step site approval, learning outcomes, and career relevance. We share internship and research opportunities regularly with our students and push them to apply for these experiences. Students start applying for internship opportunities as early as their freshman year. Over the past five years, students have interned at the WV State Police Forensics Lab, Kanawha County Sheriff's office, Pennsylvania forensics labs, FBI forensics laboratory, INBRE, WVU research labs, bioarchaeological excavations, and various chemistry and biology

industry labs. Students complete a portfolio during their internship experience along with a reflective journal and supervisor evaluation. The internship experience is monitored closely and students are graded on these experiences.

- Offer more specific Forensic Science courses

During the 2018-2019 academic year, we collaboratively wrote a curriculum proposal to create five forensic specialization courses. The University approved these courses in the Spring of 2019. We now offer forensic anthropology, osteology, forensic taphonomy, fingerprint analysis, and forensic toxicology as upper-level elective courses. We currently rotate through these courses offering one 4-hour specialization course each spring semester (Appendix A).

D. Five-year trend data on graduates and majors enrolled (Data will be provided by the Director of Institutional Research and Effectiveness).

			HEPC Series 10											
AY	*Enrollment	**Degree Awarded	Productivity Standards Programs are required to meet at least one of the indicators listed below.											
2021-22	51	2	Average of Five Most Recent Years <table border="1"> <thead> <tr> <th>Degree Level</th> <th>*Enrollment</th> <th>**Degree Awarded</th> </tr> </thead> <tbody> <tr> <td>Baccalaureate</td> <td>47.6</td> <td>2.6</td> </tr> <tr> <td>Masters</td> <td>n/a</td> <td>n/a</td> </tr> </tbody> </table>			Degree Level	*Enrollment	**Degree Awarded	Baccalaureate	47.6	2.6	Masters	n/a	n/a
Degree Level	*Enrollment	**Degree Awarded												
Baccalaureate	47.6	2.6												
Masters	n/a	n/a												
2020-21	51	6												
2019-20	52	2												
2018-19	44	1												
2017-18	40	2												
5-YR AVG	47.6	2.6												
* Official fall end of term headcount														
** IPEDS Graduation data (July 1 - June 30)														

Our annual enrollment numbers increase each year through diligent recruiting efforts by Dr. Mark Flood and Kristy Henson. Together we attend every Maroon and White Day, and most SOAR Awards ceremonies. We collaborate with the admissions and recruitment staff to meet with students and parents during individual campus visits. We also took part in campus high school visits showing off our forensics lab and activities (these stopped during the COVID-19 pandemic). Over the past five years, the program has steadily increased in incoming declared majors, even during the COVID-19 pandemic. We do see a small decline in declared majors between the spring and fall semesters as some freshmen/sophomores change their majors. However, this is common as students discover who they are and what they want to study. This would be consistent with most college freshmen as most change their major at least once during their freshman year (Fig. 1).

Figure 1 specifically shows the percentage of students who remain declared forensic science majors and enrolled during that specific academic semester. As indicated by the best fit line, we see a steady increase in retention over the past 5 years. We are retaining more majors which will increase our annual graduation numbers over time. As an example, the projection for the spring 2023 semester is 8 graduates.

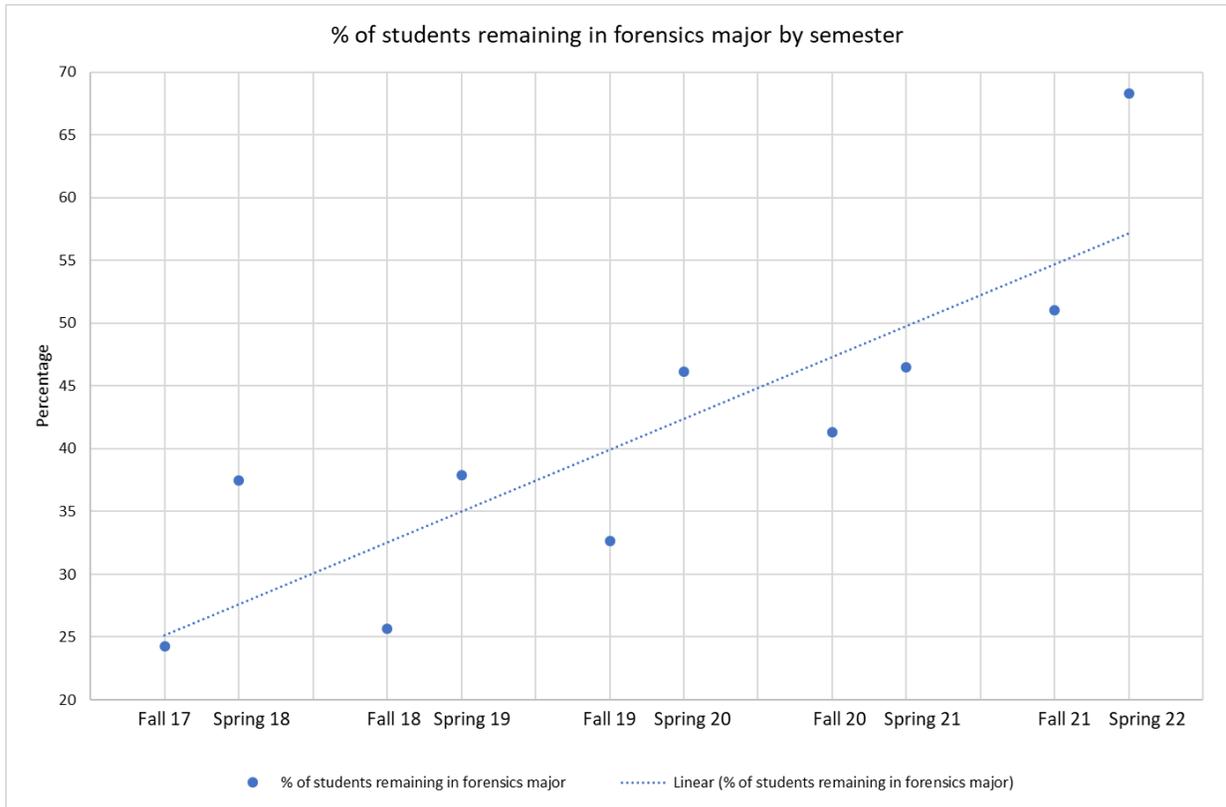


Figure 1. Percentage of forensics major retention by semester. We tend to lose 50% of our declared majors each fall but there has been a positive trend in our ability to retain forensics students over the past five years (note this only includes forensics majors, this does not include students who change their majors and are still enrolled at Fairmont State).

E. Summary of assessment model and how results are used for program improvement (A full Assessment Report is in TaskStream and can be downloaded or viewed by academic year for summation).

Full Taskstream assessments are available in Appendix E.

Over the past 5 years of assessment, we have focused on increasing student retention, recruiting students with high math SAT/ACT scores, and obtaining AAFS accreditation. Here are our results for each of these measures.

1. Obtain and maintain AAFS Accreditation

1. Findings 2017-2022: We are unable to get AAFS accreditation as it is expensive, and our program cannot afford to pay the fees with our budget.

2. Increase student retention in Forensic Science

. Findings: 2017-19: Figure 1 shows the retention percentage of forensic science majors. From Fall 2017-Spring 2019, our retention numbers were lower but have increased from Fall 2019-Spring 2022.

a. Findings 2019-22: Fairmont State University stopped requiring SAT/ACT scores when applying. It is hard to track student test score information. Annually we are retaining between 30-70% of the forensic science majors. It is easier to predict success when students come in with high ACT/SAT math scores (see pass rates in section 4.1.7).

b. Findings: 2017-22: As indicated by Table 3 our pass rate of required forensic science courses is ideal. Our high pass rates in these courses support our student learning outcomes.

3. Increase the number of Forensic Science students

Findings: 2017-22: We increased our recruiting efforts once we had 2 faculty members in the program instead of just one. Each year we email interested students, meet one on one students and their families during campus visits, give tours, host science days on campus and off campus, attend university-organized recruiting events, and mail handwritten postcards. We also started to recruit professional school-interested students. With our non-stop recruitment efforts, there has been a significant increase in enrollment and a slight increase in retention (Figure 2). Our program saw a slight decline in students during the pandemic, but our numbers remained consistent during Fall 2020 – Spring 2022. Our program could thrive if we were able to recruit students who are calculus ready. Students who are not versed in math, biology, and chemistry are less likely to succeed in our program. This is visible in Table 2 through the failure rates in introductory biology and chemistry courses.

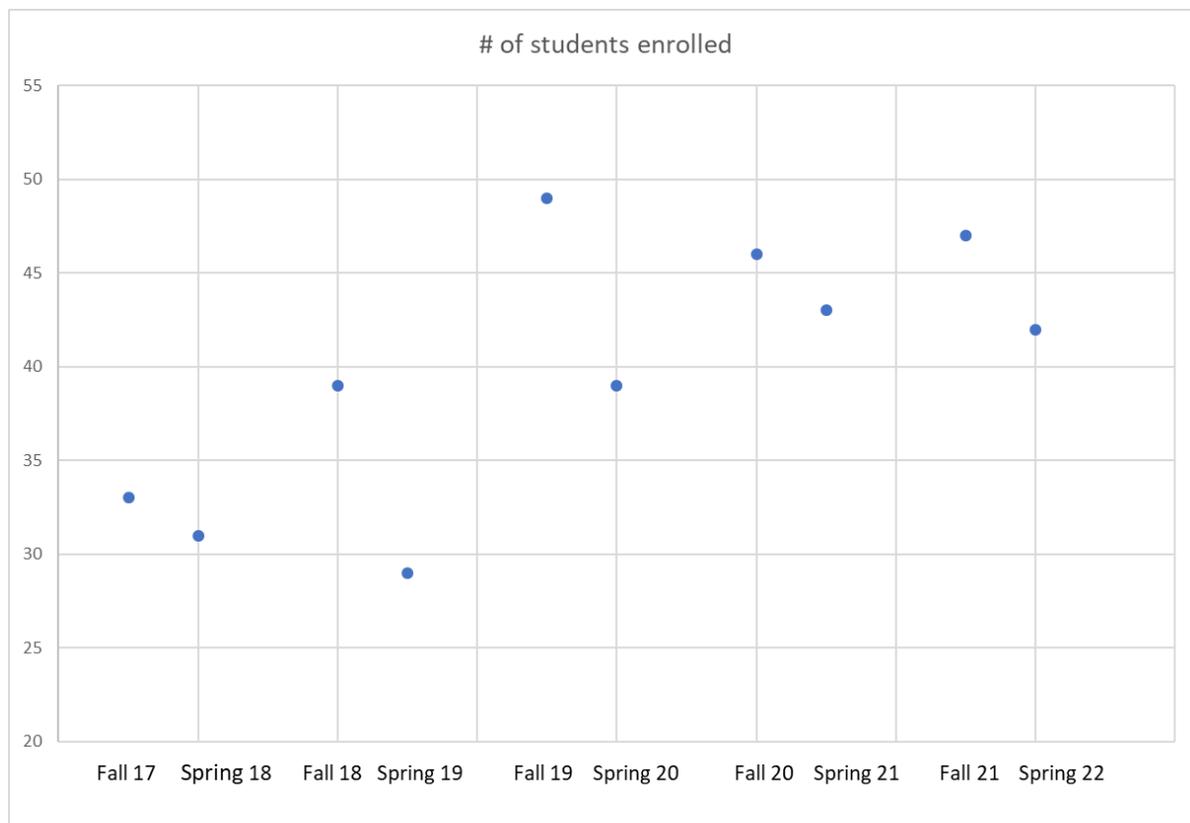


Figure 2: Number of students enrolled by semester.

F. Data on student placement (e.g., number of students employed in positions related to the field of study or pursuing advanced degrees).

One-hundred percent of our graduates over the past 5 years have either enrolled in a university for further education or are employed in a relevant medical, laboratory, or forensics-related field.

Recent Forensic Science Program Graduates		
Student name	Year	Current Status
Victoria McGinnis	2018	Working towards a Bachelor of Nursing in Charleston
Hannah Nelson	2018	Pathology morgue technician/gross room technician in Morgantown
Amanda Smith	2019	WV State Microbiology lab in Charleston
Travis Harding	2020	Police officer with Morgantown PD

Juilia Harman	2020	Physician's Assistant – working in clinical setting
Cassandra Whitlatch	2021	Masters in forensic toxicology and cancer biology, University of Kentucky
Jonathan Prince	2021	Pharmacy School, West Virginia University
Peydan McVicker	2021	Masters in health sciences, West Virginia University
Ariel Quesenberry	2021	Masters in pharmaceutical sciences, University of Florida and working at Qualitox Laboratories
Caroline Thompson	2021	Lab tech at Green Analytics
Krystal Starcher	2022	STURM Environmental as a laboratory tech
Jordyn Bush	2022	Pharmacy tech at Walgreens

Table 1: Graduates and their current employer/graduate school

Reviewer Rubric

Institution: Fairmont State University
College/Department: Science and Technology
Degree Designation (e.g., Bachelor of Arts, Bachelor of Science):
Program/Major (e.g. English, History, Chemistry): Forensic Science

Rubric Scale:

No/Limited Evidence: Limited or no substantive evidence or information is provided.

Some or partial evidence: Some substantive information is provided, but the description, narrative and/or other components are incomplete.

Sufficient evidence: Substantive information and/or narrative is provided on all key components.

N/A: The particular criterion is inappropriate or not applicable to the program under review, the item should be marked N/A.

Program Mission	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
The program has established a mission unique to its program that directly aligns with the University mission and Strategic Plan. The mission is made public (e.g., program website, catalog, master course syllabi).			X, X, X		3
The program contributes to general studies and/or complements, draws upon, and/or supports other programs (e.g., shared facilities, shared faculty, shared courses, general studies).			X, X, X		3
<p>Score: ___6___ Reviewers Observations, Comments, Questions:</p> <p>This is easily verified on the program website. Collaboration is noted via FACT Center (Bowers Grant 2018) and documented on the Fairmont State web site.</p> <p>A suggestion (not recommendation) to change the menu bar on the website to read “outcomes/mission” instead of “outcomes” as it takes you to the mission anyway. It is very clear to those who access it otherwise.</p> <p>Recommendations: None</p>					

Enrollment Data and Trends	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score									
<p>The program meets or exceeds the WV-HEPC annual productivity standards for degrees awarded and enrollments over the past 5-years.</p> <table border="1" data-bbox="226 456 919 558"> <thead> <tr> <th data-bbox="226 456 407 488">Degree Level</th> <th data-bbox="457 456 638 488">Degree Awards</th> <th data-bbox="701 456 919 488">Major Enrollment</th> </tr> </thead> <tbody> <tr> <td data-bbox="226 488 407 521">Baccalaureate</td> <td data-bbox="457 488 638 521">5</td> <td data-bbox="701 488 919 521">12.5</td> </tr> <tr> <td data-bbox="226 521 407 553">Masters</td> <td data-bbox="457 521 638 553">3</td> <td data-bbox="701 521 919 553">6</td> </tr> </tbody> </table>	Degree Level	Degree Awards	Major Enrollment	Baccalaureate	5	12.5	Masters	3	6	x	X, X			1.7
Degree Level	Degree Awards	Major Enrollment												
Baccalaureate	5	12.5												
Masters	3	6												
Five-year enrollments trends reflect program vitality and sustainability.	X, X	X			1.3									
Graduation rates indicate that student complete the program in a timely manner.			X, X, X		3*									
<p>Appendix A provides data relative to program courses, enrollment, delivery mode and credit hours per course. Enrollment in program courses do not show consistent high or low enrollment, and the number of sections is adequate for University needs each semester.</p> <p><i>Note: Each department may have specific enrollment standards for specific courses dependent on the level, faculty workload, budget and other factors. The intent of information is to provide a starting point for conversation within departments/programs about using instructional resources wisely and efficiently.</i></p>			X, X, X		3**									
Data show student success rates for all program courses. Data indicate a 70% or higher course success completion rate (note: a letter grade of C or higher is the minimum success criterion for student course completion success).		X, X, X			3									
The program tracks its enrollment trends, has plan and ongoing activities for managing enrollment in its program, and has met or exceeded its enrollment goals. *Note: This may not be clear from the self-study and could be a question for the Department.		X	X, X		2.7									

Score 14.4 Reviewers Observations, Comments, Questions:

- Team wants to acknowledge the very positive growth in the program and thus the interventions to improve student success should be supported.
- Team wants to recognize that in appendix A, data for fall 21 and spring 22 are improved but class sizes are small.

Recommendations: Program graduates are half the number required by state. Also, their performance in introductory courses is below the 70% threshold. However, the report clearly outlines why this is—difficulty in recruiting high-performing math HS graduates. The program also clearly identifies the course students must pass to complete the program: CHEM 2205. Students who pass this course WILL graduate in Forensic Science.

Enrollment data for degrees awarded (2.6/yr) is trending towards HEPC benchmark; 8 are projected for 2023. They note recommendations for the next round of PDSA. In areas where needed, “approaching” is described when moving toward goal. This is an excellent way to demonstrate to a review. Enrollment data on page 7 does not seem to match page 3 data. Enrollment data in the appendix could use a total column for all.

Curriculum	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
The curriculum is aligned with national standards. If not, there is an explanation as to why no such alignment exists.			X, X, X		3
There is a summary of degree requirements, including information on (a) Program description (b) Mission, purpose, goals of the program (c) Degree program requirements			X, X, X		3
The curriculum is aligned with and contributes to the program mission. *			X, X, X		3
The curriculum reflects a progressive challenge to students and that depth and rigor effectively prepares students for careers or advanced study.			X, X, X		3
The program provides opportunities for students to learn in ways that extend beyond the classroom.			X, X, X		3

The program has developed a process to ensure courses are offered regularly and students can make timely progress towards degree completion.			X, X, X		3
<p>Score__18____ Reviewer Observations, Comments, Questions: Faculty have done everything possible to make this a viable program producing competent graduates. The curriculum is not the problem, though they do question the teaching methods of colleagues in Chemistry.</p> <p>Curriculum is aligned with FEPAC standards, not FEPAC accredited. Suggest support of the cost for independent accreditation for program as this is identified as a quality standard.</p> <p>Recommendations: Pursue independent accreditation for quality and enrollment strategy; fund with the revenue generated from program fees.</p>					
Assessment of Student Learning	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
The student learning outcomes for the program are measurable and provide a description of what the student will be able to do.			X, X, X		3
Student program learning outcomes include higher level thinking action verbs (e.g., apply, interpret, analyze, evaluate, create, develop, etc.). See Blooms Taxonomy in Teams space).			X, X, X		3
The program has well-articulated assessment plan showing how student learning outcomes will be assessed, and how improvements based on findings will be implemented. There is clear evidence the program has collected, analyzed, and used data for improvement.			X, X, X		3
The program provided a brief summary of the most relevant assessment findings from the 5-year review cycle.			X, X, X		3
<p>Score__12____ Reviewer Observations, Comments, Questions: Exemplary assessments and reflection on this data. Faculty credentials and certifications appear that they would meet “test experience” as well as academically qualified to teach content for an independent accreditor.</p>					

The program's assessment is well-articulated and details in TaskStream and the results support this self-study.

Recommendations:

Include the Assessment Cycle Summary Report featured in TaskStream as it produces a dashboard that tells the assessment story.

Student Success	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
Graduation rates indicate that student complete the program in a timely manner.	X, X, X				
High D/F/W courses for the program have been identified <u>and</u> action taken (or to be taken) to address these courses is provided.		X, X	X		2.3
Provides a brief summary of any relevant trends in program graduation data over the past 5-year cycle.			X, X, X		3
If program graduate trends are negative, the program identifies the actions that will be taken to address those trends with reference to the data provided (were relevant).			X, X	X	3
Provides a synopsis of student engagement and success in the program (e.g., student research, conference presentations, performances, exhibitions, awards).			X, X, X		3

Score 11 Reviewer Observations, Comments, Questions:

Since Chemistry is such a large component of this program, shouldn't the Chemistry faculty be involved in assessment here? The report questions the mastery methodology practiced in Chemistry courses, but clearly the Forensics faculty are unable to make changes to the Chemistry curriculum.

Page 10 shows engagement as part of the curriculum (e.g., requiring experiential learning or practicum), research opportunities, etc. Some examples of actual student engagement can be found in faculty CVs as well (presentations, conference, student research). Challenges were noted in Calculus-ready students as a retention issue as well as performance issue.

Page 12 notes interventions to improve D/F rates with introductory core courses (CHEM 1100, PHSY 1001) and math with support. Continue to monitor via TaskStream is a way to measure this outcome.

Program is trending positively but not without overall support for graduation progress.

Recommendations: None

Faculty Contributions and Productivity	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
The program has the adequate number of full-time faculty needed to meet the mission of the program (teaching, scholarship, service).			X, X, X		3
Program faculty actively engage in professional development, research, and service as evidenced by publications, presentations, and other professional activities.			X, X, X		3
Program has examples where faculty have been recognized by their professional organization/association/societies or on campus (unit, college, university awards or honors) for their contributions.			X, X, X		3
The programs' faculty have contributed to effective teaching and/or program development (e.g., new course development, new credential, accreditation report author) over the past 5-years.			X, X, X		3

Score 12

Reviewer Observations, Comments, Questions:

This documentation comes from the faculty CVs where you see research, student presentations, evidence of grants received, notations where faculty were nominated by peers for campus honors, etc.

Recommendations:					
Resources	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
The program's operating budget is sufficient for the needs of the program.	X	X, X			1.7
Provides a summary of facilities (e.g., classrooms, labs) and equipment (e.g., instructional technology, instructional equipment, library holdings) and sufficiency in meeting program needs.			X, X, X		3
The number of faculty are sufficient in number to meet the needs of the program with appropriate teaching loads. If no, the program identified the additional faculty needed and Action Plan(s) for improvement.			X, X, X		3
Indicated whether the department was able to support effective teaching and establish effective teaching-learning environments with the existing resources. Identified additional resources the department may need in order to support the program.			X, X, X		3
<p>Score ___10.7___</p> <p>Reviewer Observations, Comments, Questions:</p> <p>Evidence is given that the space in HHH is definitely NOT adequate for the needs of the program. Concerns about odors in this new space from PCTC assigned for program use may already have been addressed, but the lack of an “independent crime house” is also confounded by locale change as well as the “smell” issues. The crime house is now located in Pence Hall according to Dr. Han as part of the new Police Academy.</p> <p>The courses the students have difficulty with are the introductory Chemistry courses, which are not under the control of program faculty.</p> <p>The strategy of having students take easier Chemistry and Math courses before tackling required courses seems reasonable.</p>					

Recommendations:

We recommend that funding be identified for classroom instruction needs. The facility issues need to be addressed because a program cannot deliver quality and provide an environment that is accommodating to staff and faculty for their optimal education experience since this is a highly specialized field. Additional research indicated that improvements to chemistry labs for HHH was prioritized on a list submitted to HEPC for funding needed for building and physical plant maintenance.

Better process for incorporating program review and the need to support of program for sustainable growth.

External Program Demand	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
The program systematically tracks graduates of the program.			X, X, X		3
Program graduates find employment or continue their education.			X, X, X		3
Data suggests that employment opportunities for graduates of this program will remain strong.			X, X, X		3

Score 9

Reviewer Observations, Comments, Questions:

Exemplary evidence that graduates use their Forensic Science degree to find employment or advanced degree programs!

The program has a graduate tracking system and this is important for showing the impact of a new program – where you can place a student in an entry level position within this profession. This is a good way to start out any new program you have in place. Some external review organizations required that this process be in place – their practice is good.

Recommendations: None

Program Review Reflection	No/Limited Evidence (1)	Some/Partial Evidence (2)	Sufficient Evidence (3)	N/A	Score
Provides a brief narrative that addresses the previous program review recommendations and the measures taken to address previous program deficiencies.			X, X, X		3
Provides a brief narrative that addresses at least three things learned about the program as a result of engaging in the program self-study.			X, X, X		3
Describes an action plan for improving the program. Indicates the applicable objective, measure and planned implemented change for improvement.		X, X, X			2
<p>Score _____</p> <p>Reviewer Observations, Comments, Questions:</p> <p>Report does an excellent job of addressing recommendations from past reports, ie hiring more faculty, implementing new electives, more recruiting.</p> <p>The report does seem to suggest that the program has done everything possible to secure graduates but that the difficulties of getting students through the program are now largely dependent on recruiting students with better (“Calc ready”) Math skills.</p> <p>There may be limited actions possible to improve the program further, given that much of the program belongs to another department. This shows a weakness in the program review by individual majors—it appears all faculty are not being held accountable for this program to which they contribute so much.</p> <p>An action plan is good, but you need five years to update program assessments and mapping in TaskStream? May this section could be better as a GANTT type chart of what you need to do, who does it and when.</p> <p>Recommendations:</p> <p>This is a minor recommendation as the review was complete; but for next cycle, drill down on some of the data that can be provided by the new institutional research directors. You can break typical enrollment data into gender, age, etc. for more demographics detail and thus help identify who is the ideal student, who is work bound student looking for career growth etc.</p>					

Just another small suggest that the study be written in the third person to keep it formal. In addition, we appreciate the forensic faculty's use of TaskStream for performance assessment and monitoring student progress toward goals.

EXAMPLES OF POTENTIAL REVIEWER QUESTIONS AND/OR REQUESTS

- Describe the collaborative process undertaken by the unit/program in developing the self-study document and supporting materials.
- Briefly describe the current organizational structure of the academic unit. Discuss any significant changes (e.g., organization, leadership, personnel, programs) since the previous program review.
- Discuss major accomplishments and progress in achieving the program's strategic goals since the previous program review.
- Provide a summary, including dates, of any curricular or programmatic changes since the previous program review and any planned changes. Describe how the use of the assessment findings influenced the curricular or programmatic changes.

Undergraduate Review Council Final Report

Name of Academic Department: Forensic Science

Date of Report: 2/20/23

Names and Departments of Review Team Members: Dr. Deborah Struth, CON, Chair, BSN Program; Dr. Angela Schwer, Chair, Department of Humanities; Dr. M. Raymond Alvarez, COBA Graduate Program Director.

Report Summary

A. Introduction: Short introductory paragraph – indicate resources reviewed and individuals or groups interviewed.

The team reviewed the self-study document prepared by Dr. Mark Flood, including the extensive appendices that included TaskStream reports of student learning outcomes and a review of outcomes related to program goals. The website was reviewed by the individual team members and several interviews were deemed necessary by team members as our review progressed. Dr. Alvarez interviewed Dr. Roof and Dr. Smallridge.

B. Program Strengths: Identify strengths of the Department/program (considering viability, curriculum and assessment, students, faculty contributions and productivity, supporting resources, strategic improvement plan etc.).

The self-study did an outstanding job outlining the strengths and potentials of the program. The recruitment of a second full-time and qualified faculty member was identified as a major improvement for the program. The expansion of the program to include 5 forensic specialization courses on a rotating schedule each spring was also presented as an improvement to their program. The forensic faculty provided graphic data indicating a steady increase in student retention in the major over the past 5 years and projected 8 graduates in the spring of 2023. Finally, they describe a robust and “non-stop” recruitment effort initiated by the faculty and administration as a strength in enrolling students and increasing knowledge of the program in high schools and communities of interest.

The academic program review demonstrates consistency with the mission of the university, in which they describe providing an exceptional educational experience while helping the students become professionals in the field of forensic science. To further support this mission, they describe the creation of the FACT (Forensic and Analytical Chemistry Technology) Center with the chemistry program permitting forensic students to train using the state-of-the-art equipment that they will experience when they graduate and enter the workforce.

Finally, the self-study demonstrated evidence of formal program review and ongoing improvement efforts. They presented outcomes data from TaskStream AMS effectively describing student learning outcomes and the attainment of program goals.

C. **Program Challenges:** Identify challenges facing the Department/program (considering at least all areas noted above, where appropriate).

The program reported that they tend to lose 50% of declared majors each fall, but presented data that suggests a trend towards greater student retention in the major over the past 5 years; however, the program fails to achieve the HEPC benchmark for degrees awarded over the past 5 years.

An additional challenge identified in the report, and of concern to the review team, was the inability of the program to attain AAFS accreditation related to the expense within the context of a small program unable to pay the related fees from their budget.

D. **Recommendations:** Provide recommendations to resolve the challenges and/or to strengthen the Department/program(s). Please consider and organize your recommendations into the two broad categories: (1) Revenue Demanding Recommendation (resources requiring additional funds); and (2) Revenue Neutral Recommendation (no additional funds required). Provide a focused one-sentence statement for each recommendation (“It is recommended that...”). Elaboration of recommendations is not needed since they should be based on information already provided in the report.

Revenue Demanding Recommendations:

1. It is recommended that improvements to the physical plant in HHH are completed.
2. It is recommended that external accreditation of the program be a goal with a target date of attainment identified.
 - a. Our team had much discussion about the importance of this step to strengthen the program. We understand the budgetary constraints that prevent pursuit of this goal at the present time, but believe, as stated in the self-study, that this needs to be a stated goal with targets for attainment within the program.

Revenue Neutral Recommendations:

1. It is recommended that a concrete mechanism of shared accountability for all faculty within forensics and supporting this program, be developed, and evaluated annually.
2. It is recommended that the program be permitted to continue at the current level of activity given it trend towards meeting HEPC graduation benchmarks and it potential to feed a new Master of Science degree within the College. It is further suggested that this recommendation be evaluated in the next self-study cycle.

E. **Interview:** Provide a list of interview questions the reviewers may have used in the review.

Dr. Smallridge identified that the BS in Forensic Science can feed a new Master of Science program in the department. Dr. Roof discussed the physical plant issues in HHH and confirmed that these were an ongoing topic of discussion and that these would hopefully be resolved soon. Dr. Roof did acknowledge the difficulty with enrollment and retention of students they have had as many students are attracted to the program but find it too hard or are unprepared for the amount of science required to work in this profession.

Program Review Council Recommendation

The institution is obligated to recommend continuance or discontinuance of a program and to provide a brief rationale for its recommendation:

1. Continuation of the program at the current level of activity;

2. Continuation of program with corrective action (for example, reducing the range of optional tracks or merging programs);

3. Identification of the program for further development (for example, providing additional institutional commitment);

_____4. Development of a cooperative program with another institution, or sharing courses, facilities, faculty, and the like;

_____5. Discontinuation of the Program