ACADEMIC PROGRAM REVIEW REPORT FORM AY2025-2026

Program(s) in the review: Conservation Ecology OEC, Fermentation Science OEC, Marine Mammal Biology OEC, Marine Natural Resources Technician OEC, Biological Sciences BA/BS/MS

Specialized Accrediting Agency (if applicable): N/A

Campuses where the program is delivered: ☒**Anchorage** ☐**KOD** ☒**KPC** ☐**MSC** ☒**PWSC**

Year of last review: The BA and BS were reviewed in AY2019-2020. The MS was reviewed in AY2020-2021. The Marine Mammal Biology OEC was implemented in Fall 2021, and the Marine Natural Resources Technician OEC was implemented in Fall 2023. The Fermentation Science OEC was implemented in Fall 2024. The OECs have not been through the program review process.

Final decision from last review: Continuation (BA/BS); Follow-up Program Review (MS)

PROGRAM SECTION (Due on March 1)

Program Review Committee:

Cindy Trussell, Professor, Kodiak Campus - Chair

Brandon Briggs, Professor, Anchorage Campus

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1. Demonstrate that the program has responded to previous recommendations.

BA/BS Recommendation 1: ***Conduct an analysis of the program's experiential learning courses and assess the impact the number of required EL courses and the schedule rotation of EL courses has on enrollment management.***

How do you know the recommendation has been successfully achieved? ***(2500 characters or less)***

The department has implemented several proactive strategies to optimize experiential learning (EL) delivery and reduce potential bottlenecks for students.

1. Multi-Campus Resource Optimization

To maintain the Ecology and Evolution track despite lower student volume, the department has transitioned BIOL A273 to a rotating delivery model. By partnering with a community campus to offer the course every other cycle, we have successfully:

Maintained pedagogical standards while accommodating lower enrollment numbers that would be unsustainable on the Anchorage campus.

Ensured degree persistence by maintaining a predictable rotation, allowing students to plan their schedules in advance.

2. Curriculum De-Bottlenecking

The department recently completed a comprehensive re-evaluation of prerequisites and corequisites for all EL courses. Key actions included:

Reducing Restrictiveness: Modifying requirements that were unnecessarily stalling student progress.

Streamlining the Pathway: Updating curriculum maps to ensure that students can begin their EL requirements earlier in their academic careers, thereby improving "Time to Degree" metrics.

Actions taken to date *(2500 characters or less)*

The Biological Sciences program requires one foundational EL course at the 200-level. Students select a pathway based on their concentration: those on the Cell and Molecular track enroll in BIOL 243, while those on the Ecology and Evolution track enroll in BIOL 273. Following this foundational requirement, students must complete a minimum of six additional upper-division EL credits across two subject areas, which typically equates to two additional courses. Currently, seat capacity across all EL offerings is sufficient to meet student demand.

1. Enrollment Trends and Track Distribution

Enrollment data indicate a higher concentration of students in the Cell and Molecular track than in the Ecology and Evolution track. We manage this variance through strategic scheduling:

BIOL 243 (Cell/Molecular): Offered every semester to accommodate high demand (Mean: 13.5 students per section).

BIOL 273 (Ecology/Evolution): Offered once per year, which aligns with the lower student volume (Mean: 6.75 students per section) without hindering degree progression.

2. Rotation Schedule and Degree Progression

Upper-division EL courses are rotated to ensure students can meet their 6-credit requirement while the department maintains optimal fill rates for resource-intensive laboratory and field courses.

Annual EL Offerings:

Bioinformatics: Mean 15.6 students

Vertebrate Biology: Mean 13.6 students

Microbial Biology: Mean 11.8 students

Animal Physiology: Mean 11.0 students

Occasional or Biennial EL Offerings:

Animal Behavior: Mean 15.0 students

Exploration Ecology Field Study: Mean 9.8 students

Molecular Biology: Mean 5.0 students

Note on Collaborative Programs: Several EL courses, including Behavioral Ecology of Marine Mammals and Exploration Ecology Field Study, appear in the annual data but are offered as part of the Semester by the Bay program via the Kachemak Bay Campus (Kenai Peninsula College). These provide critical high-

impact opportunities for students in the OECs in Marine Mammals and Conservation Ecology without duplicating main-campus resources.

Evidence of success to date *(2500 characters or less)*

The program has established a data-monitoring framework to validate the impact of recent prerequisite adjustments and the efficiency of the EL course rotation. We will measure success using the following three performance indicators:

1. Improved Curricular Timelines (Class Standing Shift)

Preliminary analysis of enrollment cycles shows a positive shift in the timing of EL participation. Historically, more than 40% of students in foundational 200-level EL courses (BIOL A243/A273) were Juniors or Seniors—a clear indicator of a degree bottleneck. We have just adjusted the restrictive requirements, and we hope to see junior and senior enrollment in these courses decrease. If students engage in these high-impact practice courses earlier, we might also see greater retention and persistence.

2. Reduction in Administrative Friction

Prior to the curricular updates, the department processed many manual prerequisite overrides for EL courses each semester. We hope data from the upcoming registration cycle will show a reduction in override requests. This decrease would demonstrate that the new prerequisite/corequisite logic aligns with students' actual academic flow, significantly reducing the administrative burden on faculty, the Registrar, and students.

3. Stability in Capacity and Persistence

If we see a shift toward earlier student participation, seat fill rates might increase, but they should remain stable at least. This stability demonstrates that the current rotation schedule is robust; it has successfully absorbed the "re-sequencing" of students without generating new waitlists or necessitating "off-cycle" course additions. The program is effectively delivering high-cost laboratory experiences with maximum resource efficiency.

MS Recommendation 1: ***Develop a non-thesis option. To inform the revision, conduct an analysis of the recent increase in the number of semesters to graduation, which might be causing a decrease in the number of awards per year. The revision should be completed in AY21 for implementation in fall 2021.***

How do you know the recommendation has been successfully achieved? *(2500 characters or less)*

The non-thesis MS option in Biological Sciences was developed during AY20/21 to meet student demand, expand opportunities, and increase tuition revenue. It was officially implemented in fall 2021, with the first two students enrolling that semester.

Actions taken to date *(2500 characters or less)*

See above

Evidence of success to date *(2500 characters or less)*

Enrollment data confirms that graduate students are actively utilizing the non-thesis pathway with the initial enrollment of two students enrolled in the non-thesis program immediately upon its implementation in Fall 2021. Between AY2021-22 and AY2024-25, a total of 12 students enrolled in the Non-thesis Capstone Project (BIOL A698A).

Consistent with the intent of the revision, the average time to degree declined following implementation of the non-thesis option. The number of semesters to graduation decreased from a program high in AY22 of 7.5 to a low of 5.3 in AY24. The increase to 8.5 semesters in AY25 is interpreted as an artifact of cohort size rather than a structural reversal of this trend. Four students graduated in AY25, making the average highly sensitive to individual circumstances. In several cases, students accepted external employment prior to completing degree requirements, which extended time to completion but did not reflect delays inherent to program structure or advising.

MS Recommendation 2: ***Narrow or erase the gap between the costs (teaching, research and service), needs (e.g., specialized staff support), and revenue generated (tuition, direct expenses, and indirect recovery for grants, etc.).***

How do you know the recommendation has been successfully achieved? ***(2500 characters or less)***

Success in narrowing the gap between costs and revenue is demonstrated through measurable growth in productivity paired with a strategic reduction in costs. There was a 28% increase in SCH (and therefore tuition) driven by the implementation of the non-thesis MS and Accelerated MS pathways, and the recent expansion of graduate mentoring capacity. These activities and options expanded access and incentivized high-performing UAA undergraduates to remain for advanced study. At the same time, the program enhanced instructional and administrative efficiency by reducing the total graduate-specific FTE from 1.05 in AY21 to 0.93 in AY25. In addition, the voluntary reduction of graduate teaching assistant allocations from six to five further lowered direct costs. Fiscal sustainability is reinforced by external funding, with approximately 80% of graduate students supported by faculty research grants, INBRE assistantships, or competitive national fellowships. Lastly, overall indirect cost recovery, which offsets costs associated with faculty research and thus student research, has remained consistent despite a net decrease in research-active faculty, demonstrating continued successful commitment to garnering external funds to support our programs.

Actions taken to date ***(2500 characters or less)***

Actions taken to date to narrow the gap between costs and revenue for the MS program include implementing the non-thesis MS option, which expanded student credit hours and increased graduate-level tuition. As part of this activity, we also stacked additional courses to provide greater breadth of options at the graduate level to meet the needs of the non-thesis capstone experience and thesis disciplinary foci. We do not allow students who have taken the 400-level version of a stacked course to later take the 600-level version of the course (or vice versa; this is implemented within the CCGs for the stacked courses. This prohibition does not prevent UAA undergraduates from continuing in the MS program in our department, as we also implemented an accelerated MS option that allows our students to count a certain number of their undergraduate courses toward both their Baccalaureate and MS degrees (or to enroll in graduate-level courses as Baccalaureate students that count toward both degrees). Rather, the implementation of the accelerated MS degree reduced barriers to admission to our program, likely contributing to the increase in graduate students. Indeed, total SCH at the graduate level increased by 28% from AY22 (data for AY21 were not available in IR) to AY25 (251 to 323 SCH). In addition to increasing SCH, to address graduate program costs, the department volunteered to reduce its graduate teaching assistant allocation from 6 GTAs/year to 5 GTAs/year.

As noted above, the college supports five graduate students on graduate teaching assistantships. The remaining graduate students (~20, depending on the year) are supported primarily by fund-two graduate research assistantships (faculty grant awards, INBRE GRAs, etc.) and a small number by competitive graduate fellowships (e.g., NSF GRF); thus, the majority of our graduate students are supported by

external funds. Non-thesis students are more likely than thesis students to have outside employment rather than be supported on TAships and RAships. Irrespective of graduate student support (GTA vs GRA, etc.), graduate research activities for thesis and non-thesis students (lab work, field work, etc.) are supported by faculty grant awards.

We do not have faculty dedicated to a graduate program, and our MS program is integrated with our undergraduate programs. Faculty research activities are not MS program-specific, as faculty research programs engage both graduate and undergraduate students in original research.

Evidence of success to date *(2500 characters or less)*

The impact of these actions is evidenced by the following data:

The MS program requires minimal total FTE through strategic course stacking and workload caps. Graduate-only course work is limited to 9 credits (0.3 FTE). The occasional 4-credit "unevenly stacked" courses adds 0.07 FTE, such that formal graduate instruction has remained stable at 0.37 FTE per year.

Mentorship and Oversight Metrics:

1. Curriculum: Students complete either a thesis (12 credits of BIOL 698/699) or a capstone (6 credits of BIOL 698A).

2. Workload Caps: Faculty mentorship is capped at 1.5 cr/semester, with committee service at 0.5 cr/year.

3. FTE Reduction: Total department FTE dedicated to graduate mentorship decreased from 0.6 in AY21 to 0.47 in AY25.

Program Oversight: Administrative oversight required 0.08 FTE (AY21) and 0.1 FTE (AY25).

Total Program Footprint: By combining instruction, mentorship, and oversight, the total graduate program-specific requirement was reduced from 1.05 FTE in AY21 to 0.93 FTE in AY25. This demonstrates a significant increase in operational efficiency while maintaining the instructional rigor required for both thesis and non-thesis pathways.

Indirect cost recovery (ICR) varied from a high of $622,790 in AY21 to a low of $465,130 in AY24, then rebounded to $623,808 in AY25. Despite fluctuations, the ICR of the biological sciences faculty remained consistent, with a mean and median of about $564,700 from AY16 to AY25. Despite a decrease in research-active faculty, current members are successful in securing external funds. Ten percent of IRC supports the department, and 4% goes to the PI, covering research costs such as equipment, maintenance, startup expenses, waste disposal, and student support, thereby funding research activities for graduate and undergraduate students.

MS Recommendation 3: ***Reverse the downward trend in the number of degrees awarded and show that the reversal is sustained.***

How do you know the recommendation has been successfully achieved? *(2500 characters or less)*

The trend in the number of Master of Science (MS) in Biological Sciences degrees has been characterized by significant volatility over the last five years, featuring a brief recovery followed by a recent leveling off (2021, 9 awards; 2022, 6 awards; 2023, 11 awards; 2024, 3 awards; 2025, 4 awards).

The program sought to reverse a decline in total MS awards, which had dropped from a peak of 13 in 2014 to a low of only 2 in 2019. The number of graduates began to recover as the non-thesis option was introduced, with 11 MS degrees awarded in 2023. Despite the initial recovery, total MS awards decreased,

with 3 in 2024 and 4 in 2025, possibly due to the decline in thesis students following the onset of the pandemic. However, while outside of the review period, fall of 2025 saw 9 graduates and spring 2026 3 so far, indicating a recovery of degrees awarded. Importantly, fluctuations over time are not unexpected, as graduate student admissions, and therefore subsequent graduations, track faculty funding cycles (meaning, faculty are able to accept students into their labs cyclically with new projects/awards supporting new students in the program).

Actions taken to date *(2500 characters or less)*

Stabilizing the number of MS degree completions has been influenced by significant variability in research-active faculty over the past decade. Despite retirements and departures, we successfully hired three new faculty members in the last three years, all of whom now actively mentor MS students. Furthermore, we recently updated our MS Program policies to lower barriers for faculty and research scientists from the Alaska Center for Conservation Science (ACCS) and the Environment and Natural Resources Institute (ENRI) to mentor MS students. These recent changes are part of our strategic efforts to build capacity, which is expected to lead to an increase in MS student numbers in the near future.

The effects of faculty changes are reflected in the enrollment trends for required MS courses (BIOL A601, A605, A698, A698A, and A699), which are key indicators of graduate student involvement. Enrollment in these courses dropped in AY22 and AY23, coinciding with several faculty departures and indicating decreased capacity to accept, supervise, and retain graduate students in active research programs. Nonetheless, the department has successfully hired three new faculty members in the past three years. In a research-focused MS program, there is a natural delay between faculty hiring and noticeable effects on graduate enrollment and degree completion, as new faculty need time to set up labs, obtain external funding, and recruit and mentor students. The recently hired faculty have enrolled a total of 10 students over the past three years (including both thesis and non-thesis students).

Enrollment in required MS courses has increased substantially following the addition of new faculty, in some cases doubling relative to AY2023 levels. This growth aligns with the observed increase in both enrollment and degree completions in Fall 2025, suggesting that recent faculty hires are beginning to restore mentoring capacity and, when combined with expanded mentoring capacity through ACCS and ENRI, suggest stabilization of the graduate pipeline. These trends indicate that the program is entering a recovery phase consistent with rebuilt faculty strength.

Evidence of success to date *(2500 characters or less)*

The program previously saw a peak of 13 awards in 2014 before dropping to a low of only 2 in 2019. The spike to 11 awards in 2023 reflects the initial success of the non-thesis MS option, which was implemented in Fall 2021 to reduce the time to degree completion and address the declining graduation rates seen in the late 2010s.

Subsequent declines in degree awards in 2024 (3 awards) and 2025 (4 awards) reflect cohort timing effects rather than diminished program viability. In 2024, the average time to degree dropped to a five-year low of 5.3 semesters, consistent with accelerated completion goals. In contrast, the increase to 8.5 semesters in 2025 coincided with a small graduating cohort, making the average sensitive to individual circumstances. In several cases, students accepted external employment prior to completing degree requirements, delaying formal graduation without indicating attrition.

2. **Demonstrate the centrality of the program to the mission, needs, and purposes of the university and the college/community campus. Include how the program is integrating (or planning to integrate) intentionally designed opportunities for students to develop the four core competencies (Effective Communication;**

Creative and Critical Thinking; Intercultural Fluency; and Personal, Professional, & Community Responsibility). ***(3000 characters or less)***

Biological Sciences is a cornerstone program for UAA and the College of Arts & Sciences (CAS), delivering foundational coursework for life-science and health majors across campus. We offer BA, BS, and MS degrees plus workforce-aligned Occupational Endorsement Certificates (OECs) that serve statewide needs in ecology, mariculture, and fermentation science. The CAS mission emphasizes Alaska-rooted education, transformative research, and community engagement. Our degree programs operationalize this through high-impact field and lab experiences, strategic community partnerships (e.g., Semester by the Bay), and integration with premier CAS research facilities such as the Advanced Instrumentation for Microbiome Studies (AIMS) core. UAA's institutional pillars teaching, research, community engagement, and creative expression frame our program design. Our curriculum and experiential learning (EL) portfolio connect students directly to Alaska's unique environments, agencies, and industries, effectively preparing graduates for immediate professional roles and competitive graduate study.

Biological Sciences intentionally integrates UAA's four core competencies. We offer specialized capstone courses (e.g., Conservation Biology, Marine Biology, Astrobiology) that provide students campus-wide with synthesis opportunities anchored in Alaska-relevant science. We scaffold scientific communication (Competency 1) from introductory coursework (BIOL A108) to EL and capstone experiences where students produce professional posters, oral presentations, and grant-style technical writing. To strengthen this pathway in the Conservation Ecology OEC, we replaced the Biology Undergraduate Seminar with a course that explicitly trains students to communicate complex science across written, audio, video, and online platforms.

Our Experiential Learning Courses engage students in authentic research design, quantitative analysis, and iterative problem-solving (Competency 2). Assessments confirm student strength in experimental design; faculty are currently addressing growth areas, such as articulating scientific implications, by revising assignments and drafting practices. Program requirements foreground Alaska contexts (Competency 3), including stewardship and place-based research, via courses that examine ecology and environmental policy in the circumpolar North. These efforts align with GER outcomes emphasizing intercultural competence and civic engagement. Through Semester by the Bay, students work alongside agencies and nonprofits, contributing to long-term datasets and following ethical research protocols (Competency 4). Revisions such as prerequisite streamlining, EL rotations, and zero-cost materials further support equitable progress and responsible learning. Our Alaska-rooted portfolio BA/BS aligned to AAAS Vision & Change and an MS training scientists in rigorous inquiry advances UAA's goals to put students first and partner with communities.

3. Demonstrate program quality and improvement through assessment and other indicators.

i. OEC Conservation Ecology

- *1) Describe and apply basic tenets of conservation ecology and climate change; 2) Design and implement a research project to examine applied ecology in the field; 3) Describe current issues associated with ecological conservation in Alaska; 4) Demonstrate common field and lab skills used by conservation ecologists, as well as ways to communicate science to diverse audiences; 5) Describe effective ways to convey scientific information to a variety of audiences; 6) Demonstrate effective ways to share science across written, online, audio, and video platforms, both online and in person.*

Describe your key findings for these outcomes. (3500 characters or less)

The key findings for the Conservation Ecology Occupational Endorsement Certificate (OEC) indicate that students consistently meet or exceed faculty expectations across all measured learning outcomes. The

program, part of the Semester by the Bay experience in Homer, demonstrates strong academic performance and high student preparedness.

Performance on Student Learning Outcomes

Assessment results from the most recent cycles (AY22 and the biennial cycle for AY23–24) show that students are achieving the program's core objectives:

•Design and implement a research project to examine applied ecology in the field: This outcome consistently exceeded faculty expectations. Students demonstrated a high level of proficiency in conducting field-based research on applied ecology and in contributing to long-term ecological projects.

• Describe and apply basic tenets of conservation ecology and climate change. In AY22, this outcome exceeded expectations, though it was marked as meeting expectations in the subsequent 2024 biennial report.

• Describe effective ways to convey scientific information to a variety of audiences: Students met faculty expectations in describing effective ways to convey scientific information and demonstrating shared science across written, audio, and video platforms.

•Demonstrate common field and lab skills used by conservation ecologists: Students are required to work with government and non-profit professionals in real-time data collection, and their performance is often reviewed and discussed by program faculty as a group to ensure they are meeting professional standards.

Students met faculty expectations in analyzing and demonstrating common skills used by conservation ecologists.Faculty have identified several areas for process improvement to ensure better alignment between the curriculum and student achievement:

Streamlining Outcomes: Program faculty proposed condensing the six PSLOs into three or four before Spring 2025 to make the assessment process more global and efficient.

Rubric Development: There is an ongoing plan to create specific program-level rubrics to replace course-specific rubrics, allowing for a better lens to view the student experience.

Curriculum Modification: The program recently replaced an undergraduate biological sciences seminar with a science communications focus writing course. This was beneficial to the students to increase their ability to communicate with a broad audience.

Scheduling Improvements: Faculty modified course assignment sequencing to reduce overlap and allow students to fully engage in intensive field and lab work during their internships and experiential learning courses.

Describe actions taken to improve student learning for these outcomes. (3500 characters or less)

Faculty have identified several areas for process improvement to ensure better alignment between the curriculum and student achievement:

1. Streamlining Outcomes: Program faculty proposed condensing the six PSLOs into three or four before Spring 2025 to make the assessment process more global and efficient.

2. Rubric Development: There is an ongoing plan to create specific program-level rubrics to replace course-specific rubrics, allowing for a better lens to view the student experience.

3. Curriculum Modification: The program recently replaced an undergraduate biological sciences seminar with a science communications focus writing course. This was beneficial to the students to increase their ability to communicate with a broad audience.

4. Scheduling Improvements: Faculty modified course assignment sequencing to reduce overlap and allow students to fully engage in intensive field and lab work during their internships and experiential learning courses.

Describe evidence that these actions are working. (3500 characters or less)

Evidence of program success is reflected in a 100% pass rate, and the average GPA remains just below 4.0. In addition, there have been post-graduation successes, with Conservation Ecology graduates finding work with climate lobbying groups, federal and state agencies in Alaska, North Carolina, Florida and Washington. Students from the OECs have been accepted into graduate or veterinary programs at UAA and elsewhere across the nation.

ii. OEC Marine Mammal Biology

- *1) Describe the biology, ecology, and behavior of marine mammals; 2) Demonstrate contributions to long-term marine mammal research projects; 3) Describe the current issues associated with marine mammals in Alaska; 4) Demonstrate common field and lab skills used by marine mammal biologists.*

Describe your key findings for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Assessment data from student artifacts (e.g., scientific posters, slide presentations, and skeletal articulations) and institutional records indicated strong academic performance. The program maintained a 100% pass rate, and the average GPA for all students across all courses remained just below 4.0. Faculty noted that students in the Semester by the Bay program and the Marine Mammal Biology OEC are exceptionally well-prepared and perform well in their coursework.

The ability of graduates to participate in professional research is rooted in the "High-Impact Practices" integrated into the OEC curriculum. During their studies, students engage in:

Field and Lab Projects: Students collect data through experiential learning courses like Marine Mammal Biology Experiential Learning (BIOL A432) and Behavioral Ecology of Marine Mammals Experiential Learning (BIOL A459).

Scientific Communication: Students learn to create and defend scientific posters, oral platform presentations and bone atlases based on their original data collection.

Technical Skills: They demonstrate proficiency in specific skills used by biologists, such as necropsies, photo-identification, skeletal articulations (developed in BIOL A325) and 2D/3D imaging.

Long-term Contributions: Faculty assessments indicate that students consistently exceed expectations in their ability to contribute to long-term marine mammal research projects.

Describe actions taken to improve student learning for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

The faculty identified several areas for program refinement. Based on student feedback, the program modified the sequencing of BIOL A325 (Skeletal Articulation & 2D/3D imaging) to start later in the semester. This allowed students to focus on intensive field and lab work for other courses early in the

term, reducing overlap in final assessments. Due to current staffing levels in Homer, the program has capped enrollment at 13 students until an additional full-time faculty member is hired.

Describe evidence that these actions are working. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

In Fall 2022, 14 of 16 students earned the OEC (one did not take all required courses, and another missed the graduation application deadline). In Fall 2023, all 11 students enrolled in the program earned the certificate. Faculty often mentor students in original investigations, leading to presentations at national and international research symposia and, in some cases, co-authoring papers in peer-reviewed journals.

iii. OEC Fermentation Science

- *1) Define the quality attributes of fermented foods and beverages and connect these key contributors to specific examples; 2) Summarize and explain the chemistry and microbiology of fermentation and brewing; 3) Identify and practice the technical aspects of commercial brewing; 4) Communicate effectively in a variety of contexts and formats.*

Describe your key findings for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

While this program has no data as it is brand new to the department, it was designed with community partners.

Describe actions taken to improve student learning for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

See above

Describe evidence that these actions are working. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

See above

iv. OEC Marine Natural Resources Technician

- *1) Complete basic techniques in marine science; 2) Demonstrate an understanding of concepts and principles in marine natural resource activities; 3) Demonstrate a basic knowledge of marine organisms; 4) Demonstrate proficiency in basic math skills.*

Describe your key findings for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Assessment of the Marine Natural Resource Technician (MNRT) OEC for the Spring 2024 and Spring 2025 cohorts demonstrates that students consistently meet or exceed technical and biological proficiency standards.

Performance on Student Learning Outcomes:

Basic Techniques and Organismal Knowledge: In core assessments (Biota of Alaska: Intro to Mariculture and Intro to Marine Biology), 100% of students across both cohorts (n=23) met faculty expectations. Students demonstrated the required field and laboratory competencies necessary for entry-level technician roles.

Concepts and Principles of Marine Activity: Assessment via Introduction to Oceanography (BIOL A178) confirmed that students successfully applied theoretical oceanographic concepts to resource management scenarios and met all instructor-led benchmarks.

Mathematical Proficiency: While the 2024 cohort showed strong foundational math skills, the 2025 cohort exhibited greater performance variability. This finding identified a critical need for enhanced pre-enrollment screening to ensure student readiness for the quantitative demands of the technician curriculum.

Enrollment Drivers: Internal review suggests that while grant-funded tuition increased access, it also introduced a population with varying levels of prior academic preparation. This finding has prompted a shift toward more intentional recruitment and advising strategies to ensure program rigor is maintained as the grant period concludes.

Describe actions taken to improve student learning for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Based on assessment data from the initial cohorts, faculty implemented several strategic adjustments to improve student persistence and mastery:

Strengthened Admissions Standards: To address the variance in mathematical proficiency, the department implemented a mandatory ALEKS placement exam requirement for all applicants. This ensures students possess the quantitative baseline necessary for success in marine science coursework before program entry.

Advising and Remediation Scaffolding: Students not meeting the initial math threshold are now redirected to developmental coursework prior to attempting the OEC. This proactive "pre-OEC" advising track reduces mid-program attrition and improves overall classroom performance.

Enhanced Research Oversight: To bolster success in the Oceanography project (Outcome 2), faculty increased the frequency of structured "milestone" check-ins. Students now submit iterative components of their research (Question, Hypothesis, Methods, Mock Data) for faculty review, ensuring technical errors are corrected before final analysis.

Assessment Tool Modernization: The program implemented pre- and post-program longitudinal surveys starting with the 2025 cohort. These metrics will provide granular data on "value-added" learning and professional identity development, moving beyond simple grade-based assessment.

Describe evidence that these actions are working. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Early indicators demonstrate that the shift toward more rigorous pre-enrollment screening is effectively "leveling up" the incoming student profile:

Improved Applicant Quality: For the upcoming cycle, 100% of the 26 completed applications met the revised math proficiency standard (either through ALEKS placement or prior transfer credit). This represents a significant improvement in cohort readiness compared to the 2025 cycle.

Administrative Efficiency: The requirement for "buy-in" via the ALEKS exam and pre-screening process has resulted in a more committed applicant pool, which faculty anticipate will lead to higher completion rates and more robust engagement in independent research projects.

Curricular Clarity: While final assessment data for the revised Intro to Oceanography project milestones will be collected in the next cycle, preliminary feedback indicates that the increased oversight is reducing student "bottlenecks" during the data-analysis phase of the course.

Workforce Alignment: Similar to the Conservation Ecology OEC, the MNRT program is tracking the transition of the 2024–2025 graduates into the Alaskan maritime workforce, with the revised math requirements specifically designed to meet the technical standards of state and federal agency partners.

v. OEC Marine Natural Resources Technician

- *1) Complete basic techniques in marine science; 2) Demonstrate an understanding of concepts and principles in marine natural resource activities; 3) Demonstrate a basic knowledge of marine organisms; 4) Demonstrate proficiency in basic math skills.*

Describe your key findings for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

See above - same program

Describe actions taken to improve student learning for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

See above - same program

Describe evidence that these actions are working. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

See above - same program

vi. BA Biological Sciences

- *1) Demonstrate an understanding of the core concepts in the biological sciences: evolution; structure and function relationships; information flow, exchange and storage; transformation of energy and matter; 2) Apply the process of science and construct knowledge through observations, experimentation, quantitative reasoning and hypothesis testing; 3) Read, analyze and synthesize primary literature, and communicate scientific concepts and data in written and oral form.*

Describe your key findings for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

The Bachelor of Arts in Biological Sciences program consistently sees students meeting faculty expectations across its core learning outcomes, with specific findings categorized by subject mastery, scientific process, and communication skills.

Core Concepts and Subject Mastery

Students take an exit exam that focuses on content in the biological sciences. This test is the ETS Biology Major Field Test. Data for the AY23–24 cycle show a 1-to-2-point improvement in all four major subject areas—Cell Biology, Molecular Biology & Genetics, Organismal Biology, and Population Biology, Evolution & Ecology—relative to AY18/19 averages.

Strengths: UAA students achieved at or above the national average in five of nine assessment indicators, specifically in Biochemistry and Cell Energetics, Diversity of Organisms, Population Genetics and Evolution, Ecology, and Analytical Skills. Challenges: Scores were below the national average across four indicators:

Cellular Structure, Organization, and Function; Molecular Biology and Genetics; Organisms - Animals; and Organisms - Plants. Retention of Knowledge: Faculty noted that lower scores in cell and molecular biology may occur because students typically complete these courses in their first two years, but take the ETS exit exam as juniors or seniors, potentially leading to a loss of detailed retention.

The Process of Science

Assessment of the outcome of applying the scientific process in AY21 revealed strong foundational performance but difficulty at higher levels. Achievement Levels: Institutional data showed a 92.5% pass rate in experiential learning courses, with 86% of students earning an A or B. Course Progression: Artifact analysis showed steady achievement as students moved from 200-level courses (median 2.8/4) to 300-level courses (median 2.8/4). Advanced Challenges: Students faced significant hurdles in advanced 400-level experiential labs, where the median score dropped to 2.4/4. Quantitative Reasoning: This was identified as a specific weakness; students were not meeting proficiency in this metric, with a median and mode of 2 out of 4.

Scientific Communication

When assessing the ability to read, analyze, and communicate scientific data in AY22, faculty found that students attain proficiency in standard science communication early in the program (BIOL A108). However, the findings for senior-level work in BIOL A492 were complicated by assessment tools: Rubric Incompatibility: The department's communication rubric was designed for traditional lab reports and did not accurately reflect student proficiency in the grant-proposal format used in the senior seminar. Evolving Standards: Faculty acknowledged that science communication is changing rapidly, and while instructors are keeping pace, the assessment rubrics need to be updated to capture modern modes and methods of communication.

Describe actions taken to improve student learning for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

To align with national standards and improve student learning outcomes, the Department of Biological Sciences has implemented a series of curricular and administrative reforms guided by the AAAS Vision and Change framework. These actions transition the program from a traditional "survey" model to one centered on core competencies and the authentic process of science.

1. Curricular Restructuring and Core Condensation

Faculty have streamlined the foundational curriculum by condensing previous 200- and 300-level offerings into four theory-based 200-level core courses (Cell Biology, Genetics, Ecology, and Evolution). This is supported by two high-impact experiential learning labs. This restructuring ensures students master core biological concepts earlier in their academic careers, providing a stronger scaffolding for upper-division specialization.

2. Embedding the "Process of Science."

We have eliminated the standalone ePortfolio requirement, moving from isolated reflection to integrated practice. Recognizing that iterative analysis is inherent to the scientific method, these evaluative processes are now embedded directly into laboratory and fieldwork curricula. This change reduces administrative "busy-work" while more accurately mirroring how professional biologists document and critique original research.

3. Inclusive Excellence and Accessibility

In accordance with the Vision and Change focus on a diverse and prepared scientific workforce, the department has aggressively adopted Zero Cost Textbooks (ZCT) and inclusive learning strategies. By removing the financial barriers of high-cost traditional media, we are fostering student persistence and [redacted] from day one.

4. Long-Term Success and Literacy

These structural adjustments—shifting from supplemental reflection to embedded inquiry and from high-cost materials to inclusive access—represent a fundamental move toward student-centered success. While the impact on graduation rates is long-term, these actions immediately prioritize deep scientific literacy and retention by creating a more accessible, authentic academic environment.

Describe evidence that these actions are working. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Curricular Impact and Success Rates

Longitudinal findings highlight the success of the program's curriculum redesign aligned with the AAAS Vision and Change recommendations: Redesigned Sequence: Replacing the old two-semester introductory sequence with BIOL A108 increased student retention and success from 50% to 90%. High-Impact Practices: Students are heavily engaged in original investigations, often co-authoring papers in peer-reviewed journals and presenting at national and international symposia. Post-Graduate Success: Recent graduates have been accepted into highly prestigious Ph.D. programs, such as [redacted] and have secured employment with agencies like the [redacted] and the [redacted]

vii. BS Biological Sciences

- *1) Demonstrate an understanding of the core concepts in the biological sciences: evolution; structure and function relationships; information flow, exchange and storage; transformation of energy and matter; 2) Apply the process of science and construct knowledge through observations, experimentation, quantitative reasoning and hypothesis testing; 3) Read, analyze and synthesize primary literature, and communicate scientific concepts and data in written and oral form.*

Describe your key findings for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Assessment evidence shows that students demonstrate solid comprehension of core concepts—including evolution, structure–function relationships, information flow, and energy/matter transformation. ETS Biology Major Field Test results indicate 1–2 point improvements across all conceptual domains compared to earlier cohorts, with UAA students performing at or above national averages in several areas (Biochemistry & Cell Energetics, Diversity of Organisms, Population Genetics & Evolution, Ecology, Analytical Skills). Lower performance in some subdomains (e.g., Cellular Structure/Function; Molecular Biology & Genetics; Organismal Biology—Plants & Animals) suggests that students may experience declines in retention of lower division content by the time they take the ETS exam as juniors/seniors.

Students show strong foundational ability in scientific inquiry, demonstrated through experiential learning (EL) labs and upper division coursework. Program wide data indicate a 92.5% pass rate in EL courses, with most students earning A or B grades. Artifact evaluations reveal that students perform well in experimental design and data analysis at the 200–300 level (median ~2.8/4), but performance drops at

the 400 level (median ~2.4/4), especially in quantitative reasoning, where median scores cluster around 2/4. This identifies a consistent growth area in advanced data interpretation and integrating limitations/assumptions into scientific conclusions.

Students attain proficiency early in the curriculum (e.g., BIOL A108), effectively learning foundational communication and literature analysis skills. However, assessment of senior level work revealed a mismatch between the existing communication rubric (optimized for traditional lab reports) and the grant proposal format used in BIOL A492, making it difficult to capture true performance trends. Faculty note that although students generally communicate scientific information effectively, evolving disciplinary expectations require updated assessment tools that better reflect contemporary forms of scientific communication.

Describe actions taken to improve student learning for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Removal of the ePortfolio requirement: Determined to be burdensome without improving outcomes, freeing faculty and students to focus on higher impact learning activities. Adoption of Zero Cost Textbooks (ZCT) and inclusive pedagogy: Reduces financial barriers and improves equitable access to materials across the curriculum. Mid semester evaluations: Implemented across courses to identify learning barriers early, improving persistence and responsiveness to student needs. Enhanced course sequencing and prerequisite logic for EL courses: Reduces manual override requests and aligns course flow with students' academic trajectories. A reduction in manual prerequisite override requests is anticipated—and early indications suggest this trend is beginning—demonstrating better alignment between prerequisite structure and students' actual academic trajectories.

Describe evidence that these actions are working. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Following curriculum streamlining and the redesigned introductory sequence, students demonstrated 1–2 point improvements across all four ETS Biology subdisciplines compared to earlier years, performing at or above the national average in five of nine indicators (Biochemistry & Cell Energetics, Diversity of Organisms, Population Genetics & Evolution, Ecology, Analytical Skills). This reflects stronger conceptual retention and validates the revised curriculum structure.

Experiential Learning (EL) reforms—including prerequisite simplification and earlier access—have resulted in a 92.5% pass rate across EL courses, with 86% of students earning A or B grades, indicating strong engagement in research, experimentation, and data analysis.

Early impact from curricular de bottlenecking shows a positive shift toward earlier enrollment in BIOL A243 and BIOL A273, suggesting better sequencing of scientific skills development and fewer delays in accessing upper division labs.

viii. MS Biological Sciences

- *1) Have mastered the fundamental concepts of biology, including cell and molecular biology, genetics, physiology, evolution and ecology; 2) Will have a working knowledge of the principles of scientific methodology, of the methods and technology of biological research, of quantitative analysis of scientific data, and will be capable of writing a publishable scientific paper; 3) Will have a*

demonstrated mastery of at least one focus area within biology or biochemistry; 4) Are prepared for a career in biological sciences or are prepared to pursue more advanced research opportunities.

Describe your key findings for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

Student learning Outcomes 1 and 2 assess students' mastery of foundational biological knowledge and their ability to apply scientific methods, including quantitative analysis, experimental design, and scientific communication. In AY24, all students met or exceeded expectations for these outcomes by earning grades of B or higher (or "Pass" in P/NP courses) in required and elective courses outlined in their individual Graduate Study Plans (GSPs). This indicates consistent academic performance throughout the program and the successful acquisition of core disciplinary knowledge.

Assessment of these outcomes relies on multiple, complementary tools. These include successful completion of graduate coursework, faculty review and approval of GSPs, and for students in the non-thesis option, completion of a faculty-developed Comprehensive Examination. The required graduate curriculum is intentionally structured to support these outcomes. For example, BIOL A601 emphasizes experimental design and scientific reasoning through the development of an NSF-style research proposal, while BIOL A605 focuses on scientific writing and professional development. Our new course BIOL A692 focuses on presentation skills and critical thinking. Together, these courses ensure students are well prepared to conduct and communicate rigorous biological research.

Student learning Outcome 3 evaluates students' ability to achieve depth of knowledge within a specific biological subdiscipline and to communicate original research findings through a thesis or capstone experience. Student success for this outcome is reflected in strong research productivity. In AY22, graduate students co-authored 15 peer-reviewed publications and delivered 21 presentations at scientific conferences, demonstrating high levels of scholarly engagement and research competency.

Mastery is formally assessed for the thesis MS degree through the completion of a written thesis and a public oral defense, typically lasting approximately 45 minutes and evaluated by the student's graduate committee. Mastery for the non-thesis is assessed through a capstone report, a public presentation of their capstone experience, and a comprehensive exam. Faculty consistently report that the quality of theses and defenses is impressive, noting advanced analytical skills, strong command of the scientific literature, and effective communication. In addition, many graduate students extend their expertise by mentoring undergraduate researchers and participating in community outreach, further reinforcing their subject-matter mastery.

Student learning Outcome 4 focuses on workforce readiness and preparation for advanced research training. Longitudinal exit and alumni survey data show that since 2011, 100% of responding graduates have secured employment in science-related fields or continued into Ph.D. programs. Recent graduates have obtained professional positions such as state and federal agencies, tribal organizations, private consulting firms, and non-profit institutions, among others. Employment opportunities remain strong, with no evidence of market saturation for program graduates.

Describe actions taken to improve student learning for these outcomes. Programs may enter "See above" if there is a significant overlap of outcomes. (3500 characters or less)

The MS Biological Sciences program has undertaken intentional curricular and programmatic diversification to better align with student goals, workforce needs, and institutional standards. A non-thesis MS option was developed and implemented in Fall 2021 to expand access to the degree and meet growing market demand for professionally focused graduate training. In AY22, the program was further

enhanced through the introduction of an Accelerated MS option, enabling well-prepared undergraduates to transition efficiently into graduate-level coursework and research. To ensure academic rigor across pathways, faculty formally approved clear expectations for the non-thesis comprehensive examination and capstone project in December 2023. In parallel, revisions to the UAA catalog standardized degree language and removed non-academic requirements, improving clarity and consistency with university-wide terminology.

Complementing these curricular changes, the program strengthened research, writing, and administrative structures to support student success and maintain equitable academic standards. The Biology Graduate Affairs Committee developed and refined program-specific thesis writing and formatting guidelines to ensure consistency in research quality across diverse laboratories and disciplines. Professional skills and core competencies are intentionally embedded within required courses (BIOL A601, A605, A606, A692), including the development of NSF-style research proposals that emphasize experimental design, quantitative analysis, and broader societal impacts. Administrative and advising processes were modernized by transitioning departmental policies and procedures to a dynamic internal web-based resources and ongoing improvements to digital degree-tracking systems. Integrating these digital resources with our annual “all-hands” meeting and a handout of key information, ensure students have immediate access to updated information and direct communication. Together, these enhancements enable more transparent advising, individualized feedback on graduate milestones, and more effective monitoring of student progress than reliance on aggregate metrics alone.

Describe evidence that these actions are working. Programs may enter “See above” if there is a significant overlap of outcomes. (3500 characters or less)

See above

b. Demonstrate program quality and improvement through other means, for example, maintaining specialized accreditation, using guidance from advisory boards/councils, responding to community partners and local needs, maintaining currency of the curriculum, implementing innovative program design, intentionally integrating high-impact teaching and learning practices into the program, and meeting indications of quality in distance education, such as the C-RAC Standards. *(3500 characters or less)*

The Biological Sciences program demonstrates program quality and continuous improvement through intentional curriculum review, innovative program design, meaningful community partnerships, and the systematic integration of high-impact teaching and learning practices.

Curriculum currency is maintained through regular curriculum retreats that engage biological science faculty across all campuses in reviewing student learning outcomes, course rotations, classroom capacities, and transfer alignment. These retreats result in targeted course updates, sequencing improvements, and alignment with emerging scientific practices, ensuring that the curriculum remains current, relevant, and responsive to student and employer needs. We have expanded some of these curriculum practices to courses that support students outside of our degree programs (e.g. in BIOL A111 we have updated prerequisites and decoupled the lecture from the lab).

The program has implemented innovative program design through experiential learning (EL) courses ranging from two to four credits, providing students with structured opportunities to apply disciplinary knowledge in authentic contexts. These experiences strengthen student engagement, skill development, and career readiness, particularly in applied and workforce-aligned pathways. Experiential learning is

further supported by the development of four Occupational Endorsement Certificate (OEC) programs in the biological sciences, directly informed by regional workforce needs and community partner input.

High-impact teaching and learning practices are intentionally embedded across the curriculum. Faculty have developed Course-Based Undergraduate Research Experiences (CUREs), supported by external funding from the National Science Foundation, for example, a place-based paralytic shellfish poisoning research experience in which students go from experimental design to collection to extraction, run an ELISA, and finally analyze their results. Additional faculty engagement in initiatives such as FUSE Fellows, Ascend, alternative grading practices, and peer-to-peer teaching evaluations promotes reflective teaching, [redacted]-minded assessment, and continuous pedagogical improvement. These practices enhance student learning outcomes, persistence, and academic confidence.

The program also demonstrates quality in distance education through adherence to recognized standards, including alignment with C-RAC principles. Online and hybrid courses are designed with consistent course organization (following Quality Matters principles), regular instructor-student interaction, accessible learning materials, and appropriate and alternative grading assessment practices to support student success across instructional modalities.

Through these combined efforts such as ongoing curriculum review, innovative and experiential program design, integration of high-impact practices, and meaningful community engagement the Biological Sciences program demonstrates a sustained commitment to quality, relevance, and continuous improvement in support of student success.

4. Demonstrate student success and the closing of achievement gaps.

a. Analyze and respond to the disaggregated data in the data sheet for your program. Provide clarifications or explanations for any positive or negative trends indicated by the data, and discuss what you are doing to close any achievement gaps. The Student Success program review metrics are Junior Graduation Rate, Associate Graduation Rate, Semesters to Degree – Graduate Programs, and Course Pass Rates by Course Level. *(3500 characters or less)*

Due to limitations in the Junior Graduation Rate data, undergraduate student success is primarily assessed through course pass rates at each course level.

Across most self-reported demographic groups, lower-division course pass rates consistently fall within the 70–90% range, indicating overall satisfactory student performance. One noted exception was those self-reporting as Alaska Native/American Indian who were in the 60% range in 2021 & 2022. However, the gap narrowed and has gradually improved over time, reaching a course pass rate of 74% in 2025. This trend is consistent with what is observed at the institutional level.

Upper-division undergraduate course pass rates are exceptionally strong across all demographics, ranging from 90% to 100%. No persistent [redacted] gaps are evident. Pass rates exceed institutional rates, indicating high achievement, effective student preparation, and strong instructional practices among Biological Sciences students in upper-division classes.

Graduate course pass rates across all self-reporting demographics remain consistently high (90–100%), demonstrating strong academic performance and instructional effectiveness at the graduate level.

However, disaggregated semesters-to-degree data reveal areas for targeted improvement. Among students self-identifying as Alaska Native/American Indian, limited reporting (three of the five years) indicates longer time-to-degree (12, 7, and 12 semesters) compared to White students, who reported consistently and completed in fewer semesters. Additional disaggregation shows that students aged 25

and older generally take more semesters to complete than younger students, and male students take longer on average than female students. These trends suggest that non-academic factors—such as work obligations, family responsibilities, and part-time enrollment—may disproportionately affect certain populations.

b. Numerous US universities, and a number of programs across UAA, have holistically evaluated their programs and courses to look for unintended barriers to student success. For example, the Purdue IMPACT (Instruction Matters: Purdue Academic Course Transformation) effort between 2011 and 2018 resulted in 325 courses being redesigned to incorporate research-based strategies known to increase student outcomes, while maintaining academic quality and rigor. Other efforts have involved course sequencing and scheduling, resulting in improved success even for graduate students. Please consider your program's graduation rate, course pass rates, and similar data sources to reflect on any barriers to students moving through the curriculum, and describe what steps you have taken (or are planning to take) for possible redesign of gateway courses, course sequence changes, course scheduling, or similar efforts. *(3500 characters or less)*

Strategic Redesign and Barrier Removal

The Department of Biological Sciences has conducted a holistic evaluation of its curriculum to identify and eliminate unintended barriers to student success, drawing on research-based strategies to improve persistence and retention.

Introductory Sequence and Curricular De-bottlenecking

Following a strategic departmental retreat in August 2025, the program initiated a structural overhaul of its introductory sequence. While a 2014 redesign improved pass rates, recent analysis identified two persistent barriers: the six-credit structure of BIOL A108 and the CHEM A105 co/prerequisite.

Structural Realignment: The six-credit BIOL A108 model often misaligned with the two-semester introductory requirements of medical and veterinary programs. We are redesigning this course and removing the CHEM A105 prerequisite to eliminate this bottleneck and improve "Time to Degree" metrics.

Administrative Efficiency: Based on faculty feedback, the ePortfolio requirement was removed in 2022 after it was determined to place a high administrative burden on students and faculty without demonstrably aiding learning outcomes.

OEC and Graduate Program Optimization

Semester by the Bay (KPC): Faculty modified course sequencing for the Marine Mammal Biology and Conservation Ecology OECs. By shifting BIOL A325 (Skeletal Articulation) to later in the term and utilizing intensive sessions, students can focus on early-semester field work and reduce assessment overlap during finals.

Graduate Pathway (MS): We redesigned the BIOL A605/692 credit structure to better reflect modern research workloads. Additionally, we are reevaluating the requirement for non-thesis students to secure an advisor prior to admission. This shift aims to reduce barriers for prospective students who lack established departmental connections while maintaining academic rigor.

High-Impact Support Structures

The department has implemented several inclusive pedagogical and advising paradigms to support a diverse student body:

Financial Accessibility: Faculty have adopted Zero Cost (ZCT) and Low Cost (LCT) textbooks to reduce financial barriers.

Peer Support: The introduction of undergraduate teaching assistants has facilitated team-based learning and peer-to-peer discussion.

Active Advising: The department utilizes active advising rather than restrictive major-declaration prerequisites to guide students toward career-appropriate milestones.

Instructional Quality: Implementation of mid-semester evaluations and peer teaching reviews ensures continuous improvement in course delivery and student retention.

Measurable Success

These holistic efforts have produced significant gains. Historically (AY10–AY15), lower-division major pass rates averaged only 45%. Following these interventions, pass rates for BIOL A100–299 courses rose to 77% by 2016. Recent data (2021–2025) confirms these gains are sustained, with pass rates consistently ranging between 78% and 83%.

c. Provide evidence of the overall success of students in the program. For example, you might talk about the percent of students in post-graduation employment in the field or a related field, the percent of students who go on to graduate school or other post-graduation training, and/or the percent of students who pass licensure examinations. You might also give examples of students who have been selected for major scholarships or other competitive opportunities. [Please do not use personally identifiable information.] ***(3500 characters or less)***

Evidence of student success across the Biological Sciences programs—encompassing the Occupational Endorsement Certificates (OECs), Baccalaureate (BA/BS), and Master of Science (MS) degrees—is demonstrated through high employment rates in specialized fields, placement into prestigious graduate programs, and significant undergraduate research achievements.

Post-Graduation Employment and Career Placement

Graduates consistently secure positions with state and federal agencies, environmental organizations, and health consortia.

Graduate-Level Success: Exit surveys of the Master of Science program indicate that 100% of respondents since 2011 have gained employment in science research or related fields or are continuing their research at the Ph.D. level.

Agency and Industry Work: Alumni have secured work with the [redacted] environmental consulting firms, and climate lobbying groups.

Specialized Roles: OEC graduates serve in niche roles such as Marine Mammal Stranding Ambassadors and researchers for the Plastic Ocean Project. Long-established department internships with federal agencies often serve as direct pipelines to permanent employment.

Graduate and Professional School Admissions

The program serves as a strong foundation for advanced academic and clinical training:

Ph.D. & Medical Tracks: Recent graduates and BUILD-EXITO scholars have been recruited by prestigious programs including [redacted] (MD/Ph.D. tracks).

Veterinary & Specialized Study: Students from the Semester by the Bay OECs have gained admission to graduate and veterinary programs at [redacted]

Scholarly Achievement and Research Excellence

Undergraduate research is a program cornerstone, resulting in professional-grade contributions:

Publications & Presentations: Students regularly co-author peer-reviewed faculty publications and present original data at national conferences, including SACNAS and the American Society for Biochemistry and Molecular Biology.

Competitive Honors: Students have secured UN Sustainable Development Academy scholarships, Alaska Heart Institute Fellowships, and Discovery Awards.

Academic Performance and Benchmarking

National Standards: On the ETS Biology Major Field Test, UAA students scored at or above the national average in five of nine indicators, including Biochemistry, Population Genetics, and Ecology.

OEC Proficiency: Both the Marine Mammal Biology and Conservation Ecology OECs maintain a 100% course pass rate, with average GPAs near 4.0.

Engagement Trends: While post-graduation engagement (returning/continuing students) declined slightly from 2021 to 2024, these figures align with broader institutional and regional trends rather than program-specific factors.

5. Demonstrate demand for the program.

a. Analyze and respond to the data in the data sheet for your program. Provide clarifications or explanations for any positive or negative trends indicated by the data, and discuss what you are doing to improve. The Demand program review metrics are Ratio of Out-of-Discipline Credit Hours to Total Credit Hours, Number of Program Graduates Who Continue Education, and Number of Program Graduates Who Return to UAA to Pursue an Additional Program. *(3500 characters or less)*

Over the past five years, program demand has remained consistently strong, with the ratio of out-of-discipline credit hours to total ranging between 63% and 66% (remaining at 66% for three of the years in the review period). This is driven in large part by the demand for Biological Sciences courses by students in the College of Health, particularly in the introductory course series. Our courses remain foundational not only to our own majors, but to students across multiple programs.

The MS in Biological Sciences program demonstrates sustainable demand, reflected in the 28% increase in graduate Student Credit Hours from AY22 to AY25. This was driven by the successful implementation of the non-thesis and Accelerated MS pathways. Although the number of program graduates dropped in 2024 and 2025, this trend was consistent with national post-pandemic funding contractions, compounded by the loss of several faculty and subsequent onboarding of new faculty, whose recruitment strengthens the program but requires time to build research groups and graduate student pipelines. Recent data show a clear recovery with 9 graduates in the fall of 2025 and 3 to date in spring 2026. Furthermore, demand for our MS graduates is high, with 100% of surveyed alumni since 2011 reporting employment in science-related fields or continuation into Ph.D. programs.

6. Demonstrate program productivity and efficiency.

Analyze and respond to the data in the data sheet for your program. Provide clarifications or explanations for any positive or negative trends indicated by the data, and discuss what you are doing to improve. The

Productivity and Efficiency program review metrics are Five Year Degree and/or Certificate Awards Trend, Student Credit Hours per Full-Time Equivalent Faculty, and Full-Time Equivalent Student per Full-Time Equivalent Faculty. *(3500 characters or less)*

Productivity and Efficiency

The Biological Sciences program demonstrates stable productivity, strong completion patterns, and significant alignment with statewide workforce needs. Performance metrics reflect sustained student demand and a proactive response to evolving regional priorities.

Five-Year Degree and Certificate Award Trends

Award trends indicate consistent output in established degrees and healthy growth in specialized OECs.

Conservation Ecology (OEC): This program shows an upward trajectory with a median of 5.5 awards (Max: 9; Min: 4). The upward trend reflects increased student interest in sustainability pathways.

Marine Mammal Biology (OEC): This certificate maintains a strong completion rate with a median of 10.5 awards (Max: 16; Min: 10). Recent data indicates a healthy stabilization of the cohort size.

Marine Natural Resources Technician (OEC): Introduced in 2023, early 2024 data confirms strong initial demand for this technician-level credential.

Baccalaureate (BA/BS): The BS program remains robust and stable with a median of 22 graduates (Max: 24; Min: 20). The BA program maintains a consistent median of 3 graduates. While smaller, the BA serves a specialized need for students pursuing interdisciplinary double majors (e.g., Biology and Art) and remains a vital component of the department's diverse offerings.

Master of Science (MS): Graduate awards are historically variable (Median: 6; Max: 11; Min: 3). The lower numbers in 2024–2025 (3 and 4 awards) follow a high-output year (11 in 2023), a cyclical pattern observed in program data since 2007. Notably, AY26 is already showing a strong recovery with 14 awards to date and increased SCH production.

Productivity and Efficiency Metrics (SCH/FTEF and FTES/FTEF)

Efficiency metrics declined from 2021 to 2023 (-13.9%), leveled off in 2024, and began a recovery in 2025 (+1.5%).

The peak values in 2021 (SCH/FTEF: 702.1; FTES/FTEF: 23.7) likely reflected unsustainably high instructional loads during the COVID-19 transition. The subsequent decline mirrored institutional trends, likely influenced by the return to in-person teaching, temporary classroom capacity restrictions (social distancing), and shifting enrollment patterns.

Departmental vs. Institutional Performance: The rebound in 2025 highlights early success in enrollment management and scheduling optimization. While Biological Sciences follows broader institutional trends, the program significantly outperforms the university average in instructional efficiency:

Biological Sciences Mean SCH/FTEF: 585.3

Institutional Mean SCH/FTEF: 407.1

Comparative Performance: Biological Sciences generated 43.77% more SCH per FTEF than the institution overall.

This confirms that the department remains a high-productivity unit, delivering credit hours and degrees at a rate far exceeding the institutional benchmark despite the challenges of resource-intensive laboratory and field instruction.

Optional: Discuss the extent to which, if any, extramural funding supports students, equipment, and faculty in the program. ***(3000 characters or less)***

Extramural funding is a key component of CAS Biological Sciences student experiential learning at all levels, providing students access to ongoing state-of-the-art scientific research projects for deep, relevant, hands-on learning of the scientific method and its applications in biological science topics relevant to Alaska and the missions of CAS and UAA. Biological Sciences and affiliated faculty have brought in high-profile research projects and experiential learning programs specifically targeted toward enhancing undergraduate and graduate education in high-impact STEM learning, such as: individual faculty research grants from a variety of funding sources; NASA; URISE; AIMS (providing advanced lab equipment); NIGMS Alaska INBRE special requests; NSF AK UNiTE; HHMI Learning Assistants; EDA Build Back Better Regional Challenge for 10-15 Marine Natural Resources OEC students; 5 introductory-level research students at PWSC funded through the EPSCoR Interface of Change; ConocoPhilips; marine natural resources staff; and other funded awards.

Approximately 30 students enroll annually in BIOL A498 and BIOL A499 credits; this number underestimates the number of students supported by external funds annually, as it does not account for undergraduates hired as undergraduate research assistants on faculty grants or supported by other external funds who do not enroll in these credits. Approximately 80% of MS students are supported by grant-funded RAships or other fellowships, and all graduate student projects are supported by external funds.

7. Assess program distinctiveness, as well as any duplication resulting from the existence of a similar program or programs elsewhere in the University of Alaska System. Is duplication justified, and, if so, why? How are you coordinating with UAA's community campuses and the other universities in the system? ***(2500 characters or less)***

UAA's Biological Sciences program provides essential, place based STEM access for Alaska's largest population center, serving a mission that complements rather than duplicates other UA programs. While UAF emphasizes high latitude research and UAS focuses on southeast maritime ecology, UAA functions as the state's urban health and population hub.

Offering Biological Sciences on multiple campuses is a geographical necessity. Because student credit hours (SCH) are driven by place bound learners who cannot commute between MAUs, UAA ensures that Southcentral Alaskans have local access to high impact laboratory and field research. Biological research is inherently regional, and UAA students engage in original scholarship tied directly to local needs.

Dual Mission Success

UAA's Open Enrollment and Dual Mission model supports non traditional students through innovative pedagogy and multiple academic pathways aligned with workforce needs. Occupational Endorsement Certificates provide rapid workforce entry, including Semester by the Bay's field intensive training in Marine Mammal Biology and Conservation Ecology. The Marine Natural Resources Technician (MNRT) and Fermentation Science OECs—developed with community partners—strengthen Alaska's emerging blue economy sectors.

The Bachelor of Arts degree offers a flexible option for interdisciplinary students or those transitioning from non science backgrounds. UAA's MS program trains the regional workforce through three tailored pathways:

• Thesis—advancing original research on Southcentral Alaska's priority issues.

• Non Thesis—serving working professionals in agencies and industry.

• Accelerated—retaining high performing UAA undergraduates for advanced training.

System Coordination and Efficiency

To maintain fiscal efficiency while honoring regional expertise, the program emphasizes "Equitable, not Equal" coordination. Community campus faculty participate fully in teaching, research, and service. Cross campus collaboration on course offerings, enrollment caps, and fees promotes consistent administrative standards. Faculty also serve on graduate committees across the UA system, strengthening shared expertise and mentorship.

8. **Assess the strengths of your program and propose one or two action steps to address areas that need improvement.** ***(4000 characters or less)***

The Biological Sciences program demonstrates several significant strengths that advance UAA's mission and serve statewide workforce needs. The department offers a diverse portfolio of Occupational Endorsement Certificates (OECs)—Marine Mammal Biology, Conservation Ecology, Marine Natural Resources Technician, and Fermentation Science—which provide accessible, high impact pathways for students to gain technical skills and contribute directly to Alaska's communities and industries. These OECs also benefit from strong partnerships, including the Native Village of Eyak, Alutiiq Pride Marine Institute, the City of Valdez, the Alaska Blue Economy Center, Kodiak Seafood and Marine Science Center, and the Alaska Center for Conservation Science (ACCS).

At the undergraduate level, the BA/BS curriculum is intentionally aligned with the nationally recognized AAAS Vision & Change framework, emphasizing core biological concepts, scientific competencies, and authentic research experiences. Students also benefit from strong pre med advising and connections with the College of Health and the Biomedical Campus, providing expanded clinical and biomedical opportunities. Anchorage's status as Alaska's population and economic hub enhances access to internships, undergraduate research, and employment with state agencies, nonprofits, and biomedical facilities.

Graduate outcomes further demonstrate program strength. The MS in Biological Sciences program has achieved 100% placement, with graduates moving directly into biology related careers or advanced study.

Two targeted improvement areas have been identified:

Improve OEC to Degree Pathways. The department will evaluate and better align OEC curricula with AA/AS and BS pathways to ensure clearer credit applicability and reduce redundancy. This work will include curriculum mapping, credit alignment, and improved advising materials to support academic mobility, particularly for place bound and non traditional students.

Expand and Systematize Internship Opportunities. To strengthen applied learning and workforce readiness, the program will expand internship opportunities and build more intentional connections with UAA's community engaged programs. This includes involving Career Services, the Center for Community Engagement & Learning (CCEL), College of Health, and the Alaska Center for Conservation Science (ACCS) in referral networks and resource development. Success will be measured by increased student participation, stronger community partnerships, and improved student feedback regarding access to experiential opportunities.

9. **Over the past two years programs and colleges conducted a comprehensive review of all fees. Moving forward, per the UAA Course Fee Policy, programs conduct a comprehensive review and re-approval of all course fees as part of the cyclical Academic Program Review process. The college's strategic budget officer**

will conduct a review, and the dean will review the results and work with the program on any changes. The authorized lead, per the Course Fee Policy, will submit forms for each fee, whether to delete, retain, or change the fee. Forms are due to OAA by the regular February 15 deadline.

What was the general outcome of the comprehensive fee review? *(2500 characters or less)*

The Biological Sciences program recently completed a systematic audit and re-approval of 21 distinct course fees across the BIOL and MBIO subjects. This comprehensive review covered laboratory and material fees at all campuses, ensuring alignment with the University's fiscal policy and student affordability goals.

The fees analyzed vary significantly based on the resource intensity of the specific sub-discipline. Fees range from a $10 laboratory fee for EL: Bioinformatics (BIOL A455) to a specialized $1,661 fee for EL: Behavioral Ecology of Marine Mammals (BIOL A459). In coordination with the Strategic Budget Officer and the Dean, each of the 21 fees was audited against critical metrics. Verification that expenditures align strictly with approved course-related materials and Adjustment of fee levels to reflect current procurement costs and actual revenue status, ensuring students are not overcharged.

This rigorous process ensured that all charges—particularly high-impact, high-cost fees associated with specialized tracks like the Marine Mammal Biology OEC—are fully justified by delivery costs and remain transparent to the student body.

Committee chair first name last name: Cindy Trussell **Date:** 3/2/2026

END OF PROGRAM SECTION

DEAN SECTION (Due on April 1)

1. Evaluation of Progress on Previous Recommendations

For each recommendation from the last program review, indicate if the recommendation has been met or has not been met and provide commendations and guidance as appropriate. *(2500 characters or less for each recommendation)*

BA/BS Recommendation 1: Conduct an analysis of the program's experiential learning courses and assess the impact the number of required EL courses and the schedule rotation of EL courses has on enrollment management. Recommendation has been met.

The program has completed a thorough analysis of experiential learning (EL) courses. Based on this analysis they have adjusted the rotation of these courses and have streamlined prerequisites to balance enrollment and reduce bottlenecks.

The program is encouraged to continue monitoring EL enrollment patterns after the current curricular changes fully cycle through multiple cohorts. EL courses are important hands-on learning opportunities for students; and as such they also are resource intensive. Thus, it is important that these offerings be monitored closely to ensure we are meeting student demands while also being efficient in our resources as measured by robust enrollments.

MS Recommendation 1: Develop a non-thesis option. To inform the revision, conduct an analysis of the recent increase in the number of semesters to graduation, which might be causing a decrease in the number

of awards per year. The revision should be completed in AY21 for implementation in fall 2021. Recommendation has been met.

The non-thesis option was implemented in Fall 2021 and is successfully supporting student demand and improving time-to-degree. Enrollment and completion data demonstrate that the option is functioning as intended.

MS Recommendation 2: Narrow or erase the gap between the costs (teaching, research and service), needs (e.g., specialized staff support), and revenue generated (tuition, direct expenses, and indirect recovery for grants, etc.). Recommendation has been met.

The department has done several things to increase demand for its master's degree, implementing non-thesis option as well as an accelerated option for UAA students. While it is difficult to determine costs of a degree program that is embedded in a department, the report does a good job in analyzing the resources devoted specifically to the master's degree. It is impressive the 80% of the graduate students in the program are supported on research grants. Funding for grad students is appreciated and is critical to the success of the program as well as the research productivity of the faculty.

The department should continue to monitor enrollments in the program as well as time to degree.

MS Recommendation 3: Reverse the downward trend in the number of degrees awarded and show that the reversal is sustained. Recommendation has not been met.

The department has implemented several changes over the last few years that impact the time-to-degree in the maters program. The department is commended for increasing mentoring capacity through new faculty and expanded ACCS/ENRI participation. However, the effects of these changes are difficult to tease out from the data. Additionally, it is difficult to determine the impact of the pandemic on enrollment data, as many programs experienced a drop in enrollment during the period. Degree completion remains a variable, however, the data included for this current academic year is very promising. The department should continue to monitor graduation data to ensure that the number of graduates each year remains at the desired levels.

Provide your analysis of #2-8 below, based on the data provided and the program's responses above.

2. Centrality of the Program *(2000 characters or less)*

The Biological Sciences is one of the largest units in the College, offering credentials ranging from an OEC to a Master's degree, and as such is central to our dual mission. The program provides foundational coursework to life science students and health majors, delivers Alaska-relevant applied learning, and offers certificates aligned with statewide environmental, mariculture, and workforce priorities. Additionally, the faculty carry out important, externally funded research that actively involves students and delivers meaningful benefits to Alaska. As indicated in the report, the program successfully integrates UAA's four core competencies into its curriculum

3. Program Quality and Improvement *(2000 characters or less)*

The review provides information of the department's 4 OECs as well as the BA, BS, and MS degrees and shows a strong commitment to assessment, curriculum design, and student success. The department's curriculum retreat uses assessment data to provide a comprehensive review of course content, bottlenecks, course sequencing and scheduling plans. The program may benefit from a review of how the credentials work together, how improvements in one area affect others, how credentials stack up (if at all), and whether assessment findings suggest broader curricular needs.

4. Student Success and the Closing of Achievement Gaps *(2000 characters or less)*

The data shows strong pass rates at both the undergraduate and graduate levels. The program has implemented several evidence-based curricular revisions to better support student success. They are encouraged to continue to monitor student success and to further investigate disparities in time-to-degree for UAA's nontraditional student population to determine whether any academic factors contribute to the differences. The program is clearly producing well-qualified graduates who secure employment in their field; the 100% placement rate for master's students either into jobs or graduate programs is noteworthy and impressive.

5. **Demand *(2000 characters or less)***

Demand for the program remains consistent with the out-of-discipline SCH reflecting the program's essential role in supporting the College of Health and General Education. Graduate SCH production has increased following the introduction of non-thesis and accelerated pathways. As mentioned above (MS3), the program is encouraged to monitor the enrollment and time to degree in its graduate programs, as MS data awards show considerable year-to-year variability.

6. Productivity and Efficiency *(2000 characters or less)*

The program provides a clear account of its productivity trends, and while I cannot independently verify the institutional comparison data cited, the internal multiyear decline in SCH/FTEF and FTES/FTEF is evident. Although there is a slight recovery in the most recent year, the long downward trend warrants continued attention. The program should continue monitoring these metrics. Additionally, the program's strong extramural funding portfolio remains an important asset that supports research activity and student engagement.

7. Duplication and Distinctiveness *(2000 characters or less)*

The program's offerings complement rather than duplicate other UA programs. UAA's focus on Southcentral Alaska's applied workforce needs, community-engaged research, and urban health and biology infrastructure provides distinct value. OECs in Marine Mammal Biology, Conservation Ecology, Marine Natural Resource Technician, and Fermentation Science demonstrate strong place-based alignment and community relevance. Coordination with community campuses and cross-unit collaborations is evident and appropriate.

8. Strengths and Ideas for Moving Forward *(2000 characters or less)*

The program exemplifies UAA's dual mission with various levels of credentials delivered at multiple campuses. As mentioned in the report, the department will work to improve OEC to degree pathways. Additionally, the program should consider how the various credentials that they offer relate to one another.

The program effectively prepares students for Alaska's workforce from training marine natural resources technicians to educating bachelor's-level students who advance into health professions. The 100% placement of Master's graduates demonstrated the program's quality and relevance as well as alignment to workforce needs. Adding additional work-based experiences to the curriculum is encouraged as it will further strengthen the program.

9. Comprehensive Fee Review *(2000 characters or less)*

In progress.

Dean's Final Evaluation

I commend the program for: ***(number and list the specific commendations in the narrative box, 2000-character limit)***

1. providing a wide array of high-quality credentials across multiple campuses at a variety of levels,

2. offering experiential and place-based learning opportunities giving students hands-on scientific training,

3. having a strong record of securing external funding that supports faculty research agenda and enhances student learning, and

4. being committed to student success as evidenced by curriculum refinement, prerequisite streamlining and evidence-based teaching practices.

I recommend that the program: ***(number and list the specific recommendations in the narrative box, 2000-character limit)***

1. continue monitoring the graduate program to ensure recent changes result in a stable program with robust enrollments with continued external support,

2. review how the programs credentials (OECS, BA/BS, MS) align with one another to provide clear pathways, improve stackability, reduce redundancy, and best support student progression,

3. expand structured internships and community-engaged opportunities across all credentials to provide students with an opportunity to strengthen their workforce readiness,

4. expand partnership with research centers to increase collaborative research, broaden mentorship opportunities, and support additional courses offerings, to strengthen and broaden the program's expertise, and

5. continue monitoring course scheduling across all campuses and delivery modalities to ensure efficient use of resources and alignment with student demand.

Dean's overall recommendation to the provost: Continuation -- Program is successfully serving its students and meeting its mission and goals. No immediate changes necessary, other than regular, ongoing program improvements.

If an Interim Progress Report is proposed, recommended year: Select N/A or Academic Year.

If a Follow-up Program Review is proposed, recommended year: Select N/A or Academic Year.

Proposed next regular Program Review: AY2033

Dean first name last name: Jenny McNulty **Date:** 3/30/2026

END OF DEAN SECTION

PROGRAM OPTIONAL RESPONSE SECTION (Due within one week of receiving dean's review)

Are you submitting an optional response? If yes, add your response below, enter your name and date, and follow the guidance below for submission. If no, enter your name and date, and follow the guidance below for submission.

No

Optional Response: ***(10,000 characters or less)***

Committee chair first name last name: Cindy Trussell **Date:** 4/9/2026

END OF PROGRAM OPTIONAL RESPONSE SECTION

PROVOST SECTION (Due on August 1)

Provost's commendations, additional or adjusted recommendations, if any, and other general comments ***(3500 characters or less)*****:**

I agree with the dean's commendations, and wish to call out that Biological Sciences is an exemplar at functioning as a department with multiple sites. The program review process included faculty from the sites where courses and programs are delivered, the report places the different credentials into a larger, coherent context, and it makes a case for using faculty resources at all locations to the larger good.

I also agree with the dean's recommendations, and would like the program to particularly focus on #2, specifically improving the OEC pathways and progressions, and #3, expanding structured internship opportunities.

Finally, I fully agree with the dean's final decision of continuation.

Having said that, the program will want to address some curricular and catalog issues in the next 2026-2027 academic year, including, among other things, full implementation of the catalog templates, addressing any hidden prerequisites, using prerequisites rather than a blanket requirement for a minimum grade of C, listing specific courses in place of a more general language, ensuring course numbering matches course design, ensuring stacked courses follow current UAA practice, and addressing any issues with contact hour calculation and messaging to students, among other possible clean-up items. In addition, I would ask the program to consider a clearer approach to the catalog copy for the BA and BS, and will want specific lists of requirements, rather than open-ended electives. I also do not understand how the "additional upper-division electives" category in the BA constitutes a subject area. The program will consult with the senior vice provost early in Fall 2026 to discuss this comprehensive clean up and come up with a plan to make the changes over the AY26-27 year, to be implemented in the AY28-29 catalog. Also, over the next year I am asking the program to consider whether it might make sense to eliminate the BA and retain the BS, and to provide an explanation for the program's position on this issue.

Finally, I want to thank the program for the comprehensive review of course fees as part of this Program Review process. The program retained all 21 course fees, increasing only 4 of them. Controlling costs to students is a significant part of UAA's affordability initiative, and I wish to thank the program for its efforts in this area. Over the next year or so, I would like the program to look at course fees that have different levels at different campuses. In some cases, this might make sense, but there is at least one fee that looks like it easily could be aligned.

Provost's decision: Continuation -- Program is successfully serving its students and meeting its mission and goals.

No immediate changes necessary, other than regular, ongoing program improvements.

Interim Progress Report: Select N/A or Academic Year.

Follow-up Program Review: Select N/A or Academic Year.

Next regular Program Review: AY2031

Provost's signature: DocuSigned by: Denise Pungo AE7EE55F615543D...

Date: June 26, 2026