Assessment Cycle 2025 – 2026

Program: Bachelor of Science (BS) in Physical Science (637)

School of STEM

College: Arts and Sciences

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Northwestern Mission. Northwestern State University is a responsive, student-oriented institution committed to acquiring, creating, and disseminating knowledge through innovative teaching, research, and service. With its certificate, undergraduate, and graduate programs, Northwestern State University prepares its increasingly diverse student population to contribute to an inclusive global community with a steadfast dedication to improving our region, State, and nation.

College of Arts and Sciences' Mission. College of Arts and Sciences' Mission. The College of Arts & Sciences, the largest college at Northwestern State University, is a diverse community of scholars, teachers, and students, working collaboratively to acquire, create, and disseminate knowledge through transformational, high-impact experiential learning practices, research, and service. The College strives to produce graduates who are productive members of society equipped with the capability to promote economic and social development and improve the overall quality of life in the region. The College provides an unequaled undergraduate education in the social and behavioral sciences, English, communication, journalism, media arts, biological and physical sciences, and the creative and performing arts, and at the graduate level in the creative and performing arts, English, TESOL, and Homeland Security. Uniquely, the College houses the Louisiana Scholars' College (the State's designated Honors College), the Louisiana Folklife Center, and the Creole Center, demonstrating its commitment to community service, research, and preservation of Louisiana's precious resources.

School of STEM. The School of Science, Technology, Engineering, and Math (STEM) at Northwestern State University serves to create a collaborative environment for natural and applied science education that inspires students and faculty to engage in an interdisciplinary approach to developing strong analytical skills in interpersonal communication, critical and creative thinking, research, and data literacy as they become lifelong learners who are prepared for an ever-changing, global STEM community. The school delivers Associate degrees in Veterinary Technology and Engineering Technology (with concentrations in Electronics, Industrial, and Advanced Manufacturing), and Bachelor of Science degrees in Biology (with concentrations in Biomedical, Clinical Laboratory Science, Forensic Science, Natural Science, and Veterinary Technology), Applied Microbiology (with concentrations in Environmental and Applied Microbiology and Medical and Health Profession), Physical Science (with concentrations in chemistry,

forensic laboratory science, physics, and biochemistry), Industrial Engineering Technology, Electronics Engineering Technology (with concentrations in Electronics and Biomedical), and Mathematics (with concentrations in Healthcare Informatics, Actuarial Mathematics, Applied Mathematics, Sports Analytics, and Computer Science). The School also offers minors in Biology, Microbiology, Wildlife Management, Mathematics, Engineering Technology, Industrial Engineering Technology, Physics, and Chemistry. As well as Post-Baccalaureate certificates in Quality Control and Project Management.

Physical Science Program Mission Statement. The mission of the Northwestern State University Physical Science program is to provide a comprehensive education in chemistry and physics for all our majors and to create a unique training environment for students wishing to pursue graduate or professional education.

Purpose: The primary goal of the Physical Science program is to prepare students to enter the job market competitively at the bachelor level or to further their education in either graduate or professional school.

Methodology: The assessment process for the Physical Science program is as follows:

(1) Data from assessment tools (both direct and indirect, quantitative and qualitative) are collected and returned to the program coordinator;

(2) The program coordinator will analyze the data to determine whether students have met measurable outcomes;

(3) Results from the assessment will be discussed with the program faculty;

(4) The program coordinator, in consultation with the Director of the School of STEM as well as the faculty of the department will propose changes to measurable outcomes and/or assessment tools for the next assessment period and, where needed, curricula and program changes.

NOTE: The Bachelor of Science in Physical Science is a relatively new program with low enrollment. Therefore, data collection was limited to small numbers of students (between 3 and 8, depending on the course) who took the required, major courses assessed.

Student Learning Outcomes:

SLO 1. Students will identify the basic components of the atomic structure.

Course Map: Tied to the course syllabus objectives

CHEM1030: General Chemistry I

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Measure 1.1. (Direct – knowledge)

Throughout the course, students will learn the structure of atoms and the importance of each subatomic particle. Each student is required to pass a quiz covering these concepts. The target is to have 75% of students attain a quiz grade of ≥70%.

Findings: Target was not met.

Analysis: In AC 2024–2025, 100% (4/4) of the Physical Science students assessed obtained a quiz grade of ≥ 70%; therefore, the target was met. This performance is above (+25%) the goal of 75% of students earning a target of ≥ 70% on this assessment. This implies that the students were able to successfully demonstrate appropriate knowledge of the structure of atoms and the importance of each subatomic particle.

Based on the analysis of the AC 2024-2025 assessment results, in AC 2025-2026, the faculty offered a higher number of exams throughout the semester, with each exam covering a smaller amount of material. Increasing frequency of testing while decreasing the amount of material being assessed provided more opportunities for students to engage with the instructors and address potential deficiencies with lower stakes assessments. The faculty also continued to offer the students supplementary instruction in general chemistry courses (1030/1031/1040/1041). As a result of these changes in AC 2025-2026, the target was not met. Twenty percent (20% or 1/5) of the Physical Science students assessed obtained a quiz grade of ≥ 70%. This performance is below (-55%) the goal of 75% of students earning a target of ≥ 70% on this assessment. This implies that the students struggled to demonstrate appropriate knowledge of the structure of atoms and the importance of each subatomic particle. When comparing the results from AC 2024 – 2025, there is a decrease in the percentage of students meeting the target (-80%).

Decision: In AC 2025-2026, the target was not met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the faculty will adopt a new edition of the textbook (published by Pearson). This new edition includes an AI assistant tool that will be used by both instructors and students. In AC 2026-2027, the target will be revised so that 70% of students attain a quiz grade of ≥70%.

These changes will improve the student's ability to demonstrate appropriate knowledge of the structure of atoms and the importance of each subatomic particle, thereby continuing to push the cycle of improvement forward.

Measure 1.2. (Indirect – survey)

At the end of the course, a survey is administered to students to gauge their appraisal of their understanding of the basic concepts of atomic structure covered in the course. The target is to have 75% of the students report above average or excellent knowledge of the indicated concepts.

Findings: Target was not met.

Analysis: In AC 2024-2025, the target was not met. Twenty-five percent (25% or 1/4) of the Physical Science students assessed gauged their understanding of the basic concepts of atomic structure covered in the course as above average or excellent. This performance was below (-50%) the goal of 75% of students gauging their understanding as above average or excellent.

Based on the analysis of the AC 2024-2025 results, in AC 2025-2026, the faculty offered a higher number of exams throughout the semester, with each exam covering a smaller amount of material. Increasing frequency of testing while decreasing the amount of material being assessed provided more opportunities for students to engage with the instructors and address potential deficiencies with lower stakes assessments. This led, in turn, to more confidence among the students in Physical Science. The faculty also continued to offer the students supplementary instruction in general chemistry courses (1030/1031/1040/1041). At the start of AC 2025-2026, the Physical Science assessment coordinator, in consultation with the Department Head of Physical Science, met with the instructors and discuss the delivery of content and the timing of assessments. These changes improved the students' confidence in their understanding of the basic concepts of atomic structure.

As a result of these changes, in AC 2025-2026 the target was not met. Forty percent (40% or 2/5) of the Physical Science students assessed indicated that their understanding of the basic concepts of atomic structure covered in the course was as above average or excellent. This performance is below (-35%) the goal of 75% of students gauging their understanding as above average or excellent. This implies that the students struggled with gauging their understanding of the basic concepts of atomic structure as above average or excellent. When comparing the results from AC 2024-2025, there is an increase in the percentage of students meeting the target (+15%).

Decision: In AC 2025-2026, the target was not met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the faculty will adopt a new edition of the textbook (published by Pearson). This new edition includes an AI assistant tool that will be used by both instructors and students. In AC 2026-2027, the target will be revised so that 70% of students rate their understanding as "above average" or "excellent."

These changes will improve the students' confidence in their understanding of the structure of atoms and the importance of each subatomic particle, thereby continuing to push the cycle of improvement forward.

SLO 2. Students will be able to classify the natural laws of thermodynamics and mechanics.

Course Map: Tied to the course syllabus objectives

CHEM 1040: General Chemistry II

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PHYS 2510: General Analytical Physics I.

Measure 2.1. (Direct – knowledge)

Throughout the course, students will learn about the various natural laws of thermodynamics. Each student is required to pass a quiz covering the concepts of thermodynamics (CHEM 1040). The target is to have 75% of students attain a quiz grade of ≥70%.

Findings: Target was not met.

Analysis: In AC 2024-2025, 50% (1/2) of the Physical Science students assessed obtained a quiz grade of ≥ 70%; therefore, the target was not met. This performance is below (-25%) the goal of 75% of students earning a target of ≥ 70% on this assessment. This implies that the students struggled to successfully demonstrate appropriate knowledge of the various natural laws of thermodynamics.

Based on the analysis of the AC 2024-2025 results, in AC 2025-2026, the faculty offered a higher number of exams throughout the semester, with each exam covering a smaller amount of material. Increasing frequency of testing while decreasing the amount of material being assessed provided more opportunities for students to engage with the instructors and address potential deficiencies with lower stakes assessments. This will, in turn, lead to better understanding of the various natural laws of thermodynamics among the students in Physical Science. The faculty also continued to offer the students supplementary instruction in general chemistry courses (1030/1031/1040/1041).

As a result of these changes, in AC 2025-2026 the target was not met. One (1) of 8 (12.5%) of the Physical Science students assessed obtained a quiz grade of ≥ 70%. This performance is below (-62.5%) the goal of 75% of students earning a target of ≥ 70% on this assessment. This implies that the students struggled to successfully demonstrate appropriate knowledge of the various natural laws of thermodynamics. When comparing the results from AC 2024-2025, there is a decrease in the percentage of students meeting the target (-37.5%).

Decision: In AC 2025-2026, the target was not met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the faculty will adopt a new edition of the textbook (published by Pearson). This new edition includes an AI assistant tool that will be used by both instructors and students. In AC 2026-2027, the target will be revised so that 70% of students achieve a quiz grade of ≥70%.

These changes will improve the student's ability to learn about various natural laws of thermodynamics, thereby continuing to push the cycle of improvement forward.

Measure 2.2. (Direct – knowledge)

Throughout the course, students will learn about the various natural laws of mechanics. Each student is required to pass a quiz covering the concepts of mechanics (PHYS 2510). The target is to have 75% of students attain a quiz grade of ≥70%.

Findings: Target was not met.

Analysis: In AC 2024–2025, 25% (1/4) of the students assessed were able to successfully articulate, via a written quiz, the natural laws of mechanics. This performance is below (-50%) the goal of 75% of students earning a target of ≥ 70% in the quiz.

Based on the analysis of the AC 2024-2025 results, in AC 2025-2026, the faculty implemented the following changes to drive the cycle of improvement. The order in which the general analytical physics course is offered was changed (PHYS 2510/2520). This resulted in PHYS 2510 being offered in the spring semester, instead of the fall semester. This means that students entering the course had the opportunity to complete the necessary math course before taking PHYS 2510, which should have helped them feel more confident and better prepared for the course. In addition, both PHYS 2510 and PHYS 2520 course material were been updated to include all the topics recommended by the American Physical Society. These changes improved the student's ability to learn about the various natural laws of mechanics, and how to identify and apply these concepts in real-life situations. As a result of these changes, in AC 2025-2026, the target was not met. One third (1/3 or 33%) of the Physical Science students assessed obtained a quiz grade of ≥ 70%. This implies that the students struggled to successfully demonstrate appropriate knowledge of the various natural laws of mechanics. When comparing the results from AC 2024-2025, there is an increase in the percentage of students meeting the target (+8%).

Decision: In AC 2025-2026, the target was not met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the Physical Science department has hired a new Assistant Professor of Physics who will teach the relevant courses and implement updated instructional strategies aligned with the program's learning outcomes. In AC 2026-2027, the target will be revised so that 70% of students achieve a quiz grade of ≥70%.

These changes will improve the student's ability to learn about the various natural laws of mechanics, and how to identify and apply these concepts in real-life situations, thereby continuing to push the cycle of improvement forward.

SLO 3. Students will be able to communicate scientific information.

Course Map: Tied to the course syllabus objectives

CHEM 4920: Scientific Communication

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PHYS 4940: Scientific Communication

Measure 3.1. (Direct – ability)

Throughout all sections of the Scientific Communication courses (CHEM4920 and PHYS4940), students will learn about the various aspects of communication in the sciences. Each student will write a scientific article and that article will be assessed using a standard rubric. The target is to have 70% of students earn a final score of ≥ 70% on the assignment.

Findings: Target was met.

Analysis: In AC 2024-2025, 100% (1/1) of the students were able to successfully write a scientific article. This performance is above (+30%) the goal of 70% of students earning a final score of ≥ 70% on the assignment.

Based on the analysis of the AC 2024-2025 results, in AC 2025-2026, the faculty provided an additional lesson centered on the use of Artificial Intelligence (AI) in Scientific Communication. This was decided because the new technologies and methodologies provided by AI will improve efficiency in the search of scientific literature and in writing techniques. These changes have the potential to improve the student's ability to write a scientific article. As a result of these changes, in AC 2025-2026 the target was met. All (100% or 3/3) of the students were able to successfully write a scientific article, therefore the target was met. When comparing the results from AC 2024-2025, there is no increase or decrease in the percentage of students meeting the target (0%).

Decision: In AC 2025-2026, the target was met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the faculty will integrate an AI-powered communication assistant. In AC 2026-2027, the target will be revised so that 75% of students earn a final score of ≥ 70% on the assignment.

These changes will improve the student's ability to write a scientific article, which will be assessed using standard rubric, thereby continuing to push the cycle of improvement forward.

Measure 3.2. (Direct – ability)

Throughout all sections of the Scientific Communication courses, students will learn about the various aspects of communication in the sciences. Each student will give an oral presentation of a scientific article/project developed by the student; the presentation will be assessed using a standard rubric. The target is to have 70% of students attain a final score of ≥ 70% on the assignment.

Findings: Target was met.

Analysis: In AC 2024-2025, the target was met with 100% (1/1) of the Physical Science students attaining a score of ≥70% on the assignment.

Based on the analysis of the AC 2024-2025 results, in AC 2025-2026, the faculty provided an additional lesson centered on the use of Artificial Intelligence (AI) in Scientific Communication and presentation of linear narratives in science. These changes had the potential to improve the students' ability to present the contents of a scientific project/article to a general audience. At the start of AC 2025-2026, the Physical Science assessment coordinator, in consultation with the Director of the School of STEM, met with the instructors and discussed delivery of content and the timing of assessments. As a result of these changes in AC 2025-2026, the target was met when 100% (3/3) of the students were able to successfully give an oral presentation of a scientific article. When comparing the results from AC 2024-2025, there is no change in the percentage of students meeting the target.

Decision: In AC 2025-2026, the target was met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the faculty will integrate an AI-powered communication assistant. In AC 2026-2027, the target will be revised so that 75% of students earn a final score of ≥ 70% on the assignment.

These changes have the potential to improve the student's ability to present the contents of a scientific project/article to a general audience, thereby continuing to push the cycle of improvement forward.

SLO 4. Students will employ critical thinking to interpret scientific literature.

Course Map: Tied to the course syllabus objectives

CHEM 4910: Capstone Course for Chemistry
PHYS 4930: Capstone Course for Physics

Measure 4.1. (Direct – Ability)

Throughout all sections of the capstone courses, students will read scientific articles from primary literature and be required to pass quizzes over the material. The target is to have 70% of students earn a final average quiz grade of ≥ 90%.

Findings: Target was not met.

Analysis: In AC 2024-2025, no physical science majors were registered for CHEM 4910/PHYS 4930 so the outcome was not assessed.

Based on the analysis of the AC 2023-2024 assessment results, in AC 2025-2026, the faculty provided a lecture and discussion session for students covering the topic of scientific literature review. Students assessed in the 2023-2024 cycle struggled with

determining the central topic for a research article. These changes improved the student's ability to read scientific articles from primary literature.
As a result of these changes in AC 2025-2026, the target was not met. Two-thirds (66%) of the students were able to successfully read scientific articles from the primary literature. This performance is below (-4%) the goal of 70% of students earning a final average quiz grade of ≥ 90%. No comparison can be made to AC 2024-2025, since no Physical Science majors were registered for CHEM 4910 / PHYS 4930 in that cycle.

Decision: In AC 2025-2026, the target was not met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the faculty will provide a lecture and discussion session for students covering the topic for a scientific research article. In AC 2026-2027, the target will be revised so that 70% of students earn a final average quiz grade of ≥ 85%.

These changes will improve students' ability to read scientific articles from primary literature and be required to pass quizzes over the material, thereby continuing to push the cycle of improvement forward.

Measure 4.2. (Direct – Ability)

Throughout all sections of the capstone courses, students will write a proposal about their capstone project. The target is to have 70% of students earn a final written assignment grade of ≥ 90% using a standard rubric.

Findings: Target was met.

Analysis: In AC 2024-2025, no physical science majors were registered for CHEM 4910/PHYS 4930 so this outcome was not assessed.

Based on the analysis of the AC 2023-2024 assessment results, in AC 2025-2026, the faculty implemented new course materials. The faculty also included a presentation on the components of a proposal and effective writing techniques. This was intended to benefit the students as it allowed them to break down what was needed for this assignment and how to build their proposals. These new lectures/activities were also designed to assist students that were struggling with one-on-one discussions.

As a result of these changes in AC 2025-2026, the target was met. Seventy-five percent (75% or 3/4) of the students were able to successfully write a proposal about their capstone project. This performance is above (+5%) the goal of 70% of students earning a final written assignment grade of ≥ 90% using a standard rubric. No comparison can be made to AC 2024-2025, since no Physical Science majors were registered for CHEM 4910/PHYS 4930 in that cycle.

Decision: In AC 2025-2026, the target was met. Based on the analysis of the AC 2023-2026 assessment results, in AC 2026-2027, the faculty will provide a lecture and

discussion session for students covering the topic for a scientific research article. In AC 2026-2027, the target will be revised so that 75% of students earn a final written assignment grade of ≥ 90% using a standard rubric.

These changes were designed to improve the students' ability to write a proposal about their capstone project, thereby continuing to push the cycle of improvement forward.

SLO 5. Students will demonstrate professional development.

Course Map: Tied to the course syllabus objectives

CHEM 4910: Capstone course for Chemistry
PHYS 4930: Capstone course for Physics.

Measure 5.1. (Direct – Skill)

Students across all sections of capstone classes will be required to give a final presentation assessed using a standard rubric. The target is to have 100% of students give a final presentation that meets ≥90% of the prescribed guidelines.

Findings: Target was not met.

Analysis: In AC 2024-2025, no physical science majors were registered for CHEM 4910/PHYS 4930 so this outcome was not assessed.

Based on the analysis of the AC 2023-2024 results, in AC 2025-2026, the faculty developed new course material that covered the topic of effective scientific communication and presentation to the public. The materials developed were aimed at addressing the challenges of timing, linear narrative, and delivering results in a way that the public could understand both the topic and its importance. These changes were intended to improve students' ability to successfully present their capstone projects to the general public.

As a result of these changes in AC 2025-2026, the target was not met. Two (2/3 or 66%) of the students across all sections of capstone classes were able to successfully give a final presentation assessed using a standard rubric. This performance was below (-34%) the goal of 100% of students giving a final presentation that meets ≥ 90% of the prescribed guidelines. No comparison can be made to AC 2024-2025, since no Physical Science majors were registered for CHEM 4910/PHYS 4930 in that cycle.

Decision: In AC 2025-2026, the target was not met. Based on the analysis of the AC 2025-2026 assessment results, in AC 2026-2027, the faculty will provide a lecture and discussion session for students covering the topic for a scientific research article. In AC 2026-2027, the target will be revised so that 95% of students give a final presentation that meets ≥90% of the prescribed guidelines.

These changes were intended to improve students' ability to successfully present their capstone projects to the general public, thereby continuing to push the cycle of improvement forward.

Measure 5.2. (Direct – Skill)

Students will be required to relate their project to a specific entry-level job that conforms to guidelines set forth in the course. The target is to have 100% of students relate their capstone projects to available workforce opportunities that meet ≥ 90% of the prescribed guidelines.

Findings: Target was met.

Analysis: In AC 2024-2025, no physical science majors were registered for CHEM 4910/PHYS 4930 so the outcome was not assessed.

Based on the analysis of the AC 2023-2024 results, in AC 2025-2026, the faculty designed an additional lesson that covered the topic of entering the job market with their current degrees and areas of expertise. These changes were intended to improve the students' ability to relate their capstone projects to available workforce opportunities.

As a result of these changes in AC 2025-2026, the target was met. All (100% or 3/3) of the students met the criteria of presenting a career-related slide and marking the connection between their discipline/capstone project and entry level careers currently available. This performance measure reflected the goal that 100% of students relate their capstone projects to available workforce opportunities and met at least 90% of the prescribed guidelines. No comparison can be made to AC 2024-2025, since no Physical Science majors were registered for CHEM 4910/PHYS 4930 in that cycle.

Decision: In AC 2025-2026, the target was met. Based on the analysis of the AC 2023-2026 assessment results, in AC 2026-2027, the faculty will provide a lecture and discussion session for students to connect their capstone project to current career options. In AC 2026-2027, the target will be revised so that 100% of students relate their capstone projects to available workforce opportunities that meets ≥ 95% of the prescribed guidelines.

These changes were intended to improve the students' ability to relate their capstone projects to available workforce opportunities, thereby continuing to push the cycle of improvement forward.

Comprehensive summary of key evidence of improvements based on analysis of results. The following reflects all the changes implemented to drive the continuous process of seeking improvement in AC 2025-2026. These changes are based on the knowledge gained through the analysis of AC 2024-2025 results.

- In Measures 1.1, 1.2, 2.1, and 2.2, prior to the start of AC 2025-2026, the Physical Science assessment coordinator, in consultation with the Department Head of Physical Science, met with the instructors and discussed the delivery of content and the timing of the assessment processes, goals, and requirements.
- In Measures 1.1, 1.2, and 2.1, the faculty increased the frequency of testing while decreasing the amount of material assessed in CHEM 1030/1031 and CHEM 1040/1041, providing more opportunities for students to engage with instructors and address potential deficiencies through lower-stakes assessments.
- In Measures 1.1, 1.2, and 2.1, the faculty offered supplementary instruction across general chemistry courses (CHEM 1030/1031/1040/1041).
- In Measure 2.2, PHYS 2510 was moved from the Fall semester to the Spring semester, allowing students to first complete the necessary mathematics prerequisite courses; PHYS 2510 and PHYS 2520 course materials were updated to include the topics recommended by the American Physical Society.
- In Measures 3.1 and 3.2, the faculty provided an additional lesson centered on the use of Artificial Intelligence (AI) in Scientific Communication in CHEM 4920/PHYS 4940, along with instruction on the presentation of linear narratives in science for oral presentations.
- In Measure 4.1, the faculty provided a lecture and discussion session for students in CHEM 4910/PHYS 4930 covering scientific literature review, supporting students' ability to identify key ideas in peer-reviewed scientific articles.
- In Measure 4.2, the faculty implemented new course materials and a presentation on the components of a proposal and effective writing techniques for the capstone courses, including one-on-one discussions to assist struggling students.
- In Measure 5.1, the faculty developed new course materials covering effective scientific communication and presentation to the public, addressing the challenges of timing, linear narrative, and delivering results in a way that the public can understand.
- In Measure 5.2, the faculty designed an additional lesson covering the topic of entering the job market with current degrees and areas of expertise, helping students relate their capstone projects to available workforce opportunities.

Plan of action moving forward:

- In Measures 1.1, 1.2, 2.1, and 2.2, the faculty will adopt a new edition of the Pearson textbook for CHEM 1030 and CHEM 1040, which includes an AI assistant tool to be used by both instructors and students to strengthen student knowledge of atomic structure and the natural laws of thermodynamics.
- In Measure 2.2, the Physical Science department has hired a new Assistant Professor of Physics who will teach the relevant physics courses (including PHYS 2510) and implement updated instructional strategies aligned with the program's learning outcomes.

- In Measures 3.1 and 3.2, the faculty will integrate an AI-powered communication assistant in CHEM 4920/PHYS 4940 to further support students' ability to write scientific articles and deliver oral presentations.
- In Measures 4.1, 4.2, 5.1, and 5.2, the faculty will provide a lecture and discussion session in CHEM 4910/PHYS 4930 covering the central topic of scientific research articles, to strengthen students' ability to interpret primary literature, write capstone proposals, and present their projects to the public.
- The faculty will revise assessment targets for AC 2026-2027 as follows: SLO 1.1 (70% of students with a quiz grade ≥ 70%); SLO 1.2 (70% of students rating their understanding as "above average" or "excellent"); SLO 2.1 and SLO 2.2 (70% of students with a quiz grade ≥ 70%); SLO 3.1 and SLO 3.2 (75% of students with a final score ≥ 70%); SLO 4.1 (70% of students with a final average quiz grade ≥ 85%); SLO 4.2 (75% of students with a final written assignment grade ≥ 90%); SLO 5.1 (95% of students delivering a final presentation meeting ≥ 90% of the prescribed guidelines); and SLO 5.2 (100% of students relating their capstone projects to available workforce opportunities meeting ≥ 95% of the prescribed guidelines).
- The Physical Science assessment coordinator, in consultation with the Director of the school of STEM, will continue to meet with instructors to discuss the delivery of content and the timing of assessments throughout AC 2026-2027.
- The faculty will continue to review the assessment instruments to ensure they reflect the course objectives and the core content of the Physical Science major, and that they are distributed across a variety of course classifications.