

Assurance of Student Learning Reflection 2024-2025

College of Health and Human Services

School of Kinesiology, Recreation, and Sport

Kinesiology 0454

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Is this an online program? ☐ Yes ☒ No

Please make sure the Program Learning Outcomes listed match those in CourseLeaf. Indicate verification here
☒ Yes, they match! (If they don't match, explain on this page under **Evaluation**)

Instructions: For the 2024-25 assessment, we are asking you to reflect on the last three-year cycle rather than collect data. It's important to take time to look over the results from the last assessment cycle and really focus on a data-informed direction going forward. In collaboration with your assessment team and program faculty, review each submitted template from 2021-2024 and consider the following for each Program Learning Outcome, add your narrative to the template, and submit the draft to your **ASL Rep** by **May 15, 2025**.

Program Student Learning Outcome 1

Program Student Learning Outcome

Interpret and apply advanced knowledge of the physiological influence of physical activity/exercise on health & fitness, sport performance, and/or clinical practice.

Evaluation

This program learning outcome remains highly relevant, as physiology and its application are foundational to the field of kinesiology. The outcome aligns well with our program's goals and reflects competencies essential to careers in health, fitness, sport performance, and clinical settings. However, it may be double-barreled, combining both "interpret" and "apply," which are distinct cognitive tasks. Additionally, including multiple application areas ("health & fitness," "sport performance," and/or "clinical practice") makes the outcome broad and harder to assess cleanly. In future revisions, we may consider splitting this outcome or clarifying its scope to improve measurability and assessment alignment.

Measurement Instrument(s)

The instruments used across the last three years are all direct measures and align reasonably well with the outcome. However, each artifact—comprehensive exams, research papers, and assignments—measures different dimensions of the SLO, which complicates longitudinal analysis. Furthermore, the rise in generative AI tools presents a new challenge, particularly for written assignments. We may need to create assignments that are more performance-based and less susceptible to AI assistance. Additionally, rubrics for the research paper and article assignments should be reviewed to ensure they explicitly assess both interpretation and application of physiological knowledge.

2021-2022:

- A comprehensive exam in Advanced Exercise Physiology (KIN 504) evaluates the students' theoretical and applied core knowledge of human physiology related to all aspects of the acute and chronic impact of exercise on health, fitness, sport performance, and clinical practice.

2022-2023:

- A formal research paper based on a self-selected topic that coincided with a teaching presentation.
- Students will complete an article assignment during the semester on topics germane to the course, designed to foster analytical and critical-thinking skills and to enhance students' ability to apply course knowledge into practical settings.

2023-2024:

	- Instrument: A comprehensive exam in Advanced Exercise Testing & Prescription (KIN 522) evaluates core knowledge and performance domains for KIN students to be prepared for the American College of Sports Medicine (ACSM) Certified Clinical Exercise Physiologist (ACSM – CEP) certification exam.
Criteria & Targets	Our targets have been appropriate in past years, but 2023–2024 results suggest a need for recalibration. Given that only 16–33% of students met the 80% target in the most recent cycle, we should examine whether the target remains realistic and achievable given current instructional methods and course alignment. Rather than lowering the bar, we may explore whether exam content or delivery needs to better match instructional outcomes. Rubrics or success criteria should also be reviewed for clarity and consistency. Supportive Data 2021-2022 - Instrument: A comprehensive exam in Advanced Exercise Physiology (KIN 504) evaluates the students’ theoretical and applied core knowledge of human physiology related to all aspects of the acute and chronic impact of exercise on health, fitness, sport performance, and clinical practice. - o Our target was for $\geq 80\%$ of enrolled students to earn $\geq 80\%$ on the comprehensive exam. - o 100% (6/6) achieved the target. 2022-2023: - Instrument (1) A formal research paper based on a self-selected topic that coincided with a teaching presentation. - o Our target was for $\geq 80\%$ of students to earn $\geq 80\%$ on the assignment. - o 100% (5/5) of students met the target - Instrument (2) Students will complete an article assignment during the semester on topics germane to the course, designed to foster analytical and critical-thinking skills and to enhance students’ ability to apply course knowledge into practical settings. - o Our target was for $\geq 90\%$ of the students to achieve a $\geq 90\%$ on the assignment - o 100% (5/5) of students met the target. 2023-2024: - Instrument: A comprehensive exam in Advanced Exercise Testing & Prescription (KIN 522) evaluates core knowledge and performance domains for KIN students to be prepared for the American College of Sports Medicine (ACSM) Certified Clinical Exercise Physiologist (ACSM – CEP) certification exam. - o Our target was for $\geq 80\%$ of students to achieve $\geq 80\%$ on the comprehensive final exam. - o Spring 2023: 16% (1 of 6) achieved the target - o Fall 2023: 33.3% (4 of 12) achieved the target
Results & Conclusion	Results: The results from 2021–2023 were consistent with our expectations, with all students meeting or exceeding the performance targets on both the comprehensive exams and the written assignments. These outcomes suggested that students were achieving mastery in both the interpretation and application of physiological principles. However, in 2023–2024, performance dropped substantially, with only 16% of students meeting the target in the spring and 33.3% in the fall. This dramatic decline was unexpected and stands out clearly across the three-year cycle. This change raises questions about potential shifts in curriculum alignment, instructional methods, or student preparedness. One contributing factor could be the shift to the Advanced Exercise Testing & Prescription course (KIN 522) as the primary assessment instrument. While this course is still relevant to the SLO, it may not provide the same depth of theoretical knowledge assessed in the previous instruments, such as

	the comprehensive exam in Advanced Exercise Physiology (KIN 504). This suggests a misalignment between the learning outcome and the chosen assessment tool during the final year of the cycle. Conclusions: The strong results in 2021–2023 indicate that the instructional methods and assessment tools used during those years were effective in helping students meet the expectations for this outcome. These tools included comprehensive exams in KIN 504 and structured writing assignments that emphasized both theoretical understanding and practical application. However, the 2023–2024 results suggest that changes to the assessment process or course emphasis may have negatively impacted student performance. The shift to using the comprehensive final exam in KIN 522 may have placed more weight on applied testing skills rather than foundational physiological theory, which could explain the lower performance. It is also possible that student readiness or instructional emphasis varied across semesters, especially given the lower-than-expected success rate in two separate cohorts. This outcome may also have suffered from its double-barreled construction—students might have demonstrated application but struggled with interpretation, or vice versa, yet both are required to meet the target. As a result, a clearer distinction in assessment design or revision of the SLO itself may be warranted to ensure a more accurate evaluation of student learning.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	To strengthen the alignment between this outcome and our assessment practices, we will begin by revising the SLO to eliminate its double-barreled structure—splitting “interpret” and “apply” into distinct outcomes or clarifying the assessment focus. In parallel, we will revisit the curriculum map to ensure that instructional content across courses consistently builds toward the desired competencies. The comprehensive exam used in KIN 522 will be reviewed and revised to better reflect both theoretical understanding and practical application of physiological principles. We will also explore introducing a secondary artifact—such as a case-based written reflection or oral defense—to directly assess students' ability to interpret physiological data, which is not fully captured by the current exam format. Our faculty will refine rubrics to more clearly distinguish between levels of performance, and we will analyze whether class sequencing or content coverage contributed to the drop in achievement in 2023–2024. These changes will be implemented by the end of the 2025–26 academic year, with ongoing monitoring and iterative adjustments through 2027–28.

Program Student Learning Outcome 2	
Program Student Learning Outcome	Recognize, evaluate and prescribe solutions from an integrated and holistic approach regarding human movement, wellness, and performance.
Evaluation	This outcome remains relevant, particularly given the increasing emphasis on interdisciplinary and systems-level thinking in kinesiology-related careers. However, it is currently triple-barreled, combining three distinct actions—“recognize,” “evaluate,” and “prescribe solutions”—each representing a different cognitive level in Bloom’s Taxonomy. This structure makes it difficult to determine whether students have mastered all components or just some. Additionally, the phrase “from an integrated and holistic approach” adds ambiguity. The outcome could benefit from revision to enhance clarity, focus, and measurability. Splitting it into two or more specific, assessable learning outcomes may provide a more accurate picture of student achievement and allow for better alignment with artifacts.
Measurement Instruments	The primary measurement instruments used over the last three cycles have included comprehensive exams and written assignments aligned with course content in Advanced Exercise Testing & Prescription (KIN 522). These instruments have generally been appropriate for

	evaluating students' ability to prescribe solutions and assess performance domains. However, they may not adequately capture the broader integrative or "holistic" thinking implied by the outcome. In particular, "recognize" and "evaluate" may not be well-represented by these tools unless rubrics or exam sections are explicitly structured to assess these cognitive actions. Additionally, the rise of AI poses a growing concern for written assignments, especially those focused on solution development. As we move forward, we may need to design more performance-based assessments (e.g., case study evaluations, in-class application activities, or oral defenses) that require real-time, individualized student responses and demonstrate truly integrated thinking. Rubrics should also be revised or created to directly assess each component of the outcome (recognition, evaluation, prescription) to ensure a valid and comprehensive measurement strategy. 2021-2022 - A comprehensive exam in Advanced Exercise Testing & Prescription (KIN 522) evaluates core knowledge and performance domains for KIN students to be prepared for the American College of Sports Medicine (ACSM) Certified Clinical Exercise Physiologist (ACSM – CEP) certification exam. 2022-2023 - A comprehensive exam in Advanced Exercise Testing & Prescription (KIN 522) evaluates core knowledge and performance domains for KIN students to be prepared for the American College of Sports Medicine (ACSM) Certified Clinical Exercise Physiologist (ACSM – CEP) certification exam. 2023-2024 - A formal research paper based on a self-selected topic that coincided with a teaching presentation - Students will complete an article assignment during the semester on topics germane to the course, designed to foster analytical and critical-thinking skills and to enhance students' ability to apply course knowledge into practical settings.
Criteria & Targets	The criteria for success—typically requiring $\geq 80\%$ of students to score $\geq 80\%$ on the selected assessment instruments—were largely appropriate during the first two years of the cycle and were met consistently. However, the 2023–2024 cycle revealed a significant drop in performance on one of the two key assignments: while 100% of students met the target on the formal research paper, only 57% met the target on the article assignment designed to assess application and analytical thinking. This discrepancy suggests a need to re-evaluate whether our targets remain realistic for all assignments, particularly as they relate to evaluating higher-order cognitive skills like integration and prescription of solutions. Moving forward, we may consider differentiating performance targets by assignment type (e.g., maintaining a high benchmark for capstone-style work, while being more flexible with lower-stakes formative tasks). Additionally, rubrics should be refined to better reflect the distinct components of the outcome (recognize, evaluate, prescribe), so that results can be interpreted more meaningfully and consistently across assessment cycles. Supportive Data: 2021-2022 - A comprehensive exam in Advanced Exercise Testing & Prescription (KIN 522) evaluates core knowledge and performance domains for KIN students to be prepared for the American College of Sports Medicine (ACSM) Certified Clinical Exercise Physiologist (ACSM – CEP) certification exam. - o Target: $\geq 80\%$ of students will score $\geq 80\%$ on the direct instrument - o 83% (5/6) met the target

	2022-2023 - A comprehensive exam in Advanced Exercise Testing & Prescription (KIN 522) evaluates core knowledge and performance domains for KIN students to be prepared for the American College of Sports Medicine (ACSM) Certified Clinical Exercise Physiologist (ACSM – CEP) certification exam. - o Target: $\geq 80\%$ of students will score $\geq 80\%$ on the direct instrument - o 83% (n = 6) met the target 2023-2024 - A formal research paper based on a self-selected topic that coincided with a teaching presentation - o Target: $\geq 80\%$ of students will score $\geq 80\%$ on the direct instrument - o 100% (7/7) met the target - Students will complete an article assignment during the semester on topics germane to the course, designed to foster analytical and critical-thinking skills and to enhance students' ability to apply course knowledge into practical settings. - o Target: $\geq 90\%$ of students will score $\geq 80\%$ on the direct instrument - o 57% (4 of 7) met the target
Results & Conclusion	Results: Results from the first two years of the cycle (2021–2023) were consistent and strong, with over 80% of students meeting performance benchmarks on the comprehensive exam. This indicated that students were achieving the intended learning outcome, particularly in the areas of evaluation and prescription of solutions. However, in 2023–2024, performance became more variable. While 100% of students met the target on the formal research paper, only 57% met the target on the article-based assignment, which was designed to assess analytical and integrative thinking. This contrast stood out and suggests potential inconsistencies in how components of the SLO—particularly “recognize” and “integrated/holistic approach”—are being taught or assessed. Conclusions: The formal research paper remains an effective tool for assessing students' ability to evaluate and prescribe within applied contexts. However, the lower performance on the article assignment highlights a possible gap in instruction related to analytical recognition of complex movement or wellness issues. It is also possible that students were not provided sufficient scaffolding for that specific task. The triple-barreled structure of the outcome further complicates interpretation, as success or failure cannot easily be attributed to any one part of the learning goal. Based on these findings, it may be beneficial to clarify expectations for what “an integrated and holistic approach” entails and to support students with structured opportunities to practice this kind of reasoning earlier in the program.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Over the next three-year cycle (2025–26 through 2027–28), we plan to revise this outcome to improve clarity and measurability. Specifically, we will consider splitting the triple-barreled structure into two distinct outcomes—one focused on recognizing and evaluating human movement and wellness issues, and another on prescribing evidence-based solutions. This change will enhance alignment with Bloom's Taxonomy and allow more precise assessment of student learning. We will also reassess our curriculum map to ensure that integrated and holistic thinking is intentionally scaffolded across multiple courses, rather than isolated in a single assignment. Assessment tools will be diversified to include more authentic, scenario-based tasks that require students to demonstrate real-time decision-making and synthesis across domains. Where appropriate, we will pilot oral presentations or structured case evaluations as a way to reduce reliance on AI-susceptible written work. Rubrics will be revised to distinguish performance on each component of the outcome, and targets may be adjusted to reflect more accurate expectations based on assignment complexity. Faculty training and collaborative rubric review will be scheduled for Fall 2025 to ensure consistent application of assessment criteria across instructors.

Program Student Learning Outcome 3	
Program Student Learning Outcome	Implement, assess, and revise consumer-based exercise prescriptions and community health initiatives based on scientific advancements.
Evaluation	This outcome remains relevant and well-aligned with current trends in kinesiology and public health. However, like previous outcomes, it is triple-barreled, combining three distinct cognitive tasks—“implement,” “assess,” and “revise.” These actions involve different knowledge and skill levels and may not always be addressed equally within a single course or artifact. While the phrase “based on scientific advancements” is appropriate for a graduate-level program, it may need clarification in instruction and rubrics to ensure consistent interpretation. To improve clarity and assessment precision, this SLO should be revised into two distinct outcomes, separating implementation from the critical evaluation and revision processes.
Measurement Instruments	The primary assessment tool for this outcome across all three years has been a final research proposal or paper, often including literature review, methodology, and presentation elements. While these instruments are direct measures and offer insight into students’ ability to apply evidence-based thinking, they may not fully capture implementation or revision skills—particularly in practical or community contexts. To better assess this outcome, future instruments should include experiential or applied components such as a program design project, mock community initiative, or simulated intervention scenario. Additionally, to mitigate the risk of AI-influenced writing, more performance-based, reflective, or collaborative assessments may be warranted. 2021-2022 Instrument: Students will be assessed through evaluation of a final research paper, including an introduction, review of literature, and detailed methodology, to be prepared and submitted in written form, as well as presented orally to the class and the professor. 2022-2023 Instrument: Students will be assessed through evaluation of a final research proposal, including an introduction, review of literature, detailed methodology, results, and discussion to be prepared and submitted in written form. 2023-2024 Instrument: Students will be assessed through evaluation of a final research proposal, including an introduction, review of literature, detailed methodology, results, and discussion to be prepared and submitted in written form.
Criteria & Targets	The criteria for success (typically $\geq 80\%$ of students scoring at or above 80%) were appropriate and met in two of the three years. In 2023–2024, however, only 66.7% of students met the target, which was notably lower than prior years. This drop suggests either increased assignment difficulty, reduced preparation, or a mismatch between the assignment and one or more parts of the outcome. It is also possible that students are less prepared to “revise” or critically reflect on their proposed interventions. This insight supports the need to reevaluate how these cognitive skills are taught and scaffolded across the program. We may also consider differentiating targets by assignment type or component. 2021-2022 Instrument: Students will be assessed through evaluation of a final research paper, including an introduction, review of literature, and detailed methodology, to be prepared and submitted in written form, as well as presented orally to the class and the professor. - Target: $\geq 80\%$ of the students will attain a score of $\geq 80\%$ on the proposal presentation and submission - 83% (5 of 6) attained the target 2022-2023

	Instrument: Students will be assessed through evaluation of a final research proposal, including an introduction, review of literature, detailed methodology, results, and discussion to be prepared and submitted in written form. - Target: $\geq 80\%$ of the students will attain a score of $\geq 80\%$ on the proposal submission - 100% (6 of 6) attained the target 2023-2024 Instrument: Students will be assessed through evaluation of a final research proposal, including an introduction, review of literature, detailed methodology, results, and discussion to be prepared and submitted in written form. - Target: $\geq 80\%$ of the students will attain a score of $\geq 80\%$ on the proposal submission - 66.7% (4 of 6) attained the target
Results & Conclusion	Results: In 2021–2022 and 2022–2023, student performance exceeded the target, with 83% and 100% of students respectively achieving the required benchmark. These results suggested that students were effectively developing and presenting evidence-based proposals. However, in 2023–2024, only 4 of 6 students (66.7%) met the benchmark, which was unexpected. This decline stands out in the three-year cycle and may reflect challenges in one or more parts of the SLO, especially the ability to revise proposals based on feedback or newly integrated scientific evidence. It also raises questions about whether the assignment instructions or rubric effectively emphasized revision as a key component. Conclusions: The use of a final research proposal has been partially effective, particularly for assessing students’ ability to design and justify exercise prescriptions. However, the inconsistent performance in the final year suggests a need to strengthen instructional support for evaluating and revising interventions. The triple-barreled nature of the outcome may also obscure which specific skill students are struggling with. Without clear rubric distinctions, faculty may be unable to determine whether the issue lies in implementation, assessment, or revision. To ensure more accurate assessment, a refined outcome and more targeted instruments are recommended, alongside greater emphasis on real-time feedback integration and reflective revision skills in the curriculum.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	For the next assessment cycle (2025–2028), we will revise this SLO to separate “implementation” from the more evaluative tasks of “assessment and revision.” This will allow us to create two focused, measurable outcomes that align more directly with distinct assessment artifacts. We also plan to introduce a new project-based artifact in which students design and revise a mock community health initiative or consumer exercise program using real or simulated data. This approach will better reflect the iterative nature of applied health programming. Rubrics will be revised to assess process-based thinking (e.g., revision decisions and rationale), and reflection components will be embedded into the assignment. We will also explore sequencing adjustments to ensure students encounter these concepts earlier in the program. Instructors will receive training on how to assess implementation versus revision effectively, and opportunities for formative feedback will be built into relevant courses before summative evaluation. These changes aim to provide a clearer picture of student learning and better prepare graduates for practical, real-world application.

Program Student Learning Outcome 4	
Program Student Learning Outcome	Evaluate research, summarize findings, and formulate opinions on overall findings/message of research.
Evaluation	This SLO is clearly relevant to both academic and professional expectations in the field of kinesiology. However, it is triple-barreled, combining three tasks—evaluating, summarizing, and formulating opinions—that reflect different cognitive demands and may not always be achieved equally by students. Each of these skills is important, but combining them into one outcome makes it difficult to isolate student

	strengths or areas for improvement. Moreover, terms like “formulate opinions” could benefit from clearer alignment with Bloom’s Taxonomy, such as “construct conclusions” or “develop interpretations,” to emphasize critical thinking over personal viewpoints. Revising this outcome into two more focused and measurable outcomes would support clearer instruction, more accurate assessment, and consistent rubric alignment.
Measurement Instruments	This SLO was only assessed during the 2023–2024 cycle using a creative and engaging assignment in which students integrated a seminal research article into a visual presentation (e.g., infographic, poster, or social media post). This is a direct measure and reflects innovative pedagogy in encouraging synthesis and communication of research findings to broader audiences. However, while this approach works well for summarization and perhaps interpretation, it may not fully capture the critical evaluation component unless paired with a rubric that explicitly assesses analytical rigor. Moving forward, this assignment could be supplemented with a short written or oral component where students critique methodology, statistical validity, or application of findings, ensuring full alignment with the outcome’s intent. 2021-2022 This SLO was not reported in this AY 2022-2023 This SLO was not reported in this AY 2023-2024 Instrument: Integrate a seminal research article into a visual presentation of the physiology in the form of a research poster, infographic, or social media post for wider dissemination.
Criteria & Targets	The success criterion for this assignment was set at $\geq 90\%$ of students earning $\geq 80\%$, and all students (100%) met this benchmark in 2023–2024. While this is encouraging, it’s important to recognize that this was the only year data were collected for this outcome, and it involved a single artifact. Before maintaining this high target, additional data points across other assignments or years will be needed to determine whether the target is realistic and consistently achievable. If the SLO is revised into separate components, each may require its own success criteria and rubric structure. 2021-2022 This SLO was not reported in this AY 2022-2023 This SLO was not reported in this AY 2023-2024 Instrument: Integrate a seminal research article into a visual presentation of the physiology in the form of a research poster, infographic, or social media post for wider dissemination. - Target: $\geq 90\%$ of students will earn $\geq 80\%$ on the assignment - 100% (7 of 7) of students met the target.
Results & Conclusion	Results: Given this was the first year this outcome was assessed, we are encouraged by the high achievement level (100% meeting the target). The creative format appeared to engage students effectively and allowed them to communicate research findings clearly. However, it is unclear whether the assignment fully assessed all aspects of the SLO, particularly the "evaluation" component. The strong performance may reflect success in summarizing and communicating findings, while critical thinking and deeper interpretation may require more rigorous evaluation in future cycles. This inaugural result is promising, but we recognize the need for additional cycles of data to assess long-term trends.

	<u>Conclusions:</u> The 2023–2024 assessment strategy demonstrated innovation in how research comprehension and communication were measured. The visual presentation approach worked well for assessing students’ ability to summarize and synthesize research findings in accessible formats. However, the current design may not adequately capture students’ ability to critically evaluate research or formulate informed interpretations of findings. The triple-barreled nature of the SLO complicates analysis, and it is likely that only part of the outcome was fully assessed. To improve accuracy and instructional alignment, the outcome should be revised, and additional complementary artifacts—such as critique papers or oral research defenses—should be introduced in subsequent cycles.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Over the next three-year cycle (2025–2028), we will revise this SLO to split the evaluation and summary components from opinion/conclusion formulation. This will allow each skill to be taught, practiced, and assessed more explicitly. We plan to continue using visual media as a way for students to summarize findings but will supplement this with a more structured research critique assignment or short reflection essay focused on evaluating methodological rigor and interpreting broader implications. Rubrics will be refined to ensure each task—evaluation, summary, and interpretation—is measured independently. Faculty will be encouraged to embed smaller formative assignments across courses to build toward the final summative task. We also aim to introduce a peer feedback element to encourage deeper engagement with research critique. By year three of the cycle, we will collect data from multiple sources to confirm the revised outcome’s effectiveness and ensure it supports students’ progression toward research literacy and evidence-based decision-making.