Assurance of Student Learning Report 2022-2023	
College of Health and Human Services	*Kinesiology, Recreation, and Sport*
Kinesiology-0454	
Danilo Tolusso	
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 **Assessment Cycle)**

Use this page to list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in the subsequent pages. Add more Outcomes as needed.			
Program Student Learning Outcome 1: Students develop and demonstrate advanced skills needed to recognize, evaluate, and prescribe solutions from an integrated and holistic approach regarding human movement, wellness, and performance.			
Instrument 1	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.		
Instrument 2			
Instrument 3			
Based on your results, check whether the program met the goal Student Learning Outcome 1.		☒ **Met**	☐ **Not Met**
Program Student Learning Outcome 2: Interpret and apply advanced knowledge of the physiological influence of physical activity/exercise on health, fitness, sport performance, and clinical practice.			
Instrument 1	A formal research paper based on a self-selected topic that coincided with a teaching presentation		
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.		
Instrument 3			
Based on your results, check whether the program met the goal Student Learning Outcome 2.		☒ **Met**	☐ **Not Met**
Program Student Learning Outcome 3: Students develop capacity as researchers and as practitioners who use evidence-based practices to develop and conduct a research project, as well as to implement, assess, and revise consumer-based exercise prescriptions and community health initiatives based on scientific advancements.			
Instrument 1	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.		
Instrument 2	Students will be assessed on their in-depth knowledge of the project and ability to talk about scientific research by putting their final project in a research presentation and presenting it to the class and the professor.		
Instrument 3			
Based on your results, check whether the program met the goal Student Learning Outcome 3.		☒ **Met**	☐ **Not Met**
Assessment Cycle Plan:			
Student learning outcomes, as currently listed, have been added to CourseLeaf. However, KIN faculty will re-assess program level, student learning outcomes next fall to potentially make changes to better align with current and soon-to-be proposed courses.			

Program Student Learning Outcome 1				
Program Student Learning Outcome	Students develop and demonstrate advanced skills needed to recognize, evaluate, and prescribe solutions from an integrated and holistic approach regarding human movement, wellness, and performance.			
Measurement Instrument 1	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 for Student Success	Students will score >/= 80% on the comprehensive exam.			
Program Success Target for this Measurement	Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 80% on the comprehensive exam.		**Percent of Program Achieving Target**	83%
Methods	Student enrollment for Spring 2022, N = 6 The multiple-choice comprehensive exam content addresses core clinical content such as EKG interpretation, Graded Exercise Testing (GXT), and prescribing exercise for clinical populations (Myocardial Infarction, Heart Failure, Stroke, & Peripheral Vascular disease).			
Measurement Instrument 2				
Criteria for Student Success				
Program Success Target for this Measurement			**Percent of Program Achieving Target**	
Methods				
Measurement Instrument 3				
Criteria for Student Success				
Program Success Target for this Measurement			**Percent of Program Achieving Target**	
Methods				
Based on your results, highlight whether the program met the goal Student Learning Outcome 1.			☒ **Met**	☐ **Not Met**
Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)				

Results: The Kinesiology students demonstrated comprehension of course content based on the outcome of the comprehensive exam for the course. The expectations are set for the graduate level course and the students worked diligently to meet or exceed the course expectations. The Graduate students attended each class for lecture and were alert and prepared to learn. As the course progressed, students participated in lecture and course discussions and demonstrated learning as the semester progressed. . tudents were encouraged to study daily and throughout each week of the course to keep up with the course content.. t was evident that the students were completing the necessary out of class preparation by reviewing their notes and reading the assigned reading in the textbook and coming to each class prepare. . hen necessary, there were individual meetings scheduled to further elucidate course material and ensure comprehension.. he comprehensive exam provides students the opportunity to recall and apply the entire knowledgebase /content of the covered throughout the entire course and to better be prepared for the format of the American College of Sports Medicine Clinical Exercise Physiologist (ACSM – CEP) certification or other nationally recognized certification or Licensure exam.

Conclusions: The KIN 522 course is a lecture based course and works well for providing the core clinical knowledge and performance domains that ensure graduate students are prepared for the American College of Sports Medicine Clinical Exercise Physiologist (ACSM – CEP) certification exam and/or to work with clinical populations in other professional careers such as Physical Therapy, Occupational Therapy, Health-Fitness facilities or other professional clinical settings. Students learn clinical knowledge, skills, and abilities throughout the semester long course and subsequently apply the course content in their clinical internship hours and/or when beginning their chosen career. A new ACSM Clinical Exercise Physiology (2019) textbook was required for the course that is specifically addresses the core knowledge and performance domains for the ACSM – CEP certification and was helpful in assuring that the course content aligned with certification preparation. It was the first time utilizing the new textbook for the course. Continued use of the new textbook will be assessed to determine how the textbook facilitates classroom learning and as a resource for certification review.

Plans for next assessment cycle: Specifically, students who have a career goal of working in Cardiac Rehabilitation, will complete the required amount of clinical internship hours (600 hours) as they continue to review KIN 522 and other pertinent graduate course content and prepare for the ACSM- CEP exam. The outcome will vary for each student and some will sit for the certification upon the completion of their clinical internship hours in the Kinesiology program. Others will begin their positions at the Cardiac Rehabilitation facility and complete the ACSM – CEP certification in their first year. Keeping in contact with graduates of the Kinesiology Graduate program will allow us to continue to track the number of students seeking the ACSM – CEP certification or other certifications and determine their level preparedness and success rate.

I addition to tracking the ACSM-CEP certification completion and outcomes, future assessments of student learning outcomes will ensure that the KIN 522 course content thoroughly addresses the ACSM core knowledge and performance domains and students and are successful when taking the comprehensive exam. The plan is to evaluate the effectiveness of the ACSM Clinical Exercise Physiology (2019) textbook in ensuring the textbook bolsters student learning and serves as a sufficient resource.

Program Student Learning Outcome 2				
Program Student Learning Outcome	Interpret and apply advanced knowledge of the physiological influence of physical activity/exercise on health, fitness, sport performance, and clinical practice.			
Measurement Instrument 1	A formal research paper based on a self-selected topic that coincided with a teaching presentation			
Criteria for Student Success	Students will score >/= 80% on the paper.			
Program Success Target for this Measurement	Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 80% on the paper.	**Percent of Program Achieving Target**	100%	
Methods	Student enrollment for the Fall 2022, N =5. **Direct:** Students are to complete a research presentation and accompanying paper.			
Measurement 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.			
Criteria for Student Success	Students will score >/= 90% on each of the assignments.			
Program Success Target for this Measurement	Our target is for >/= 90% of our students to attain the above criterion of a score of >/= 90% on each of the assignments.	**Percent of Program Achieving Target**	60% (3/5)	
Methods	Student enrollment for the Fall 2022, N = 5. **Direct:** Students completed a short article presentation assignment that required students to take information previously learned in the course and expand upon it using literature they found during personal exploration.			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.			☒ **Met**	☐ **Not Met**

Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)

Results: It was expected that students would perform well on shorter comprehensive exams throughout the semester compared to one long comprehensive final given at the end of the semester. It was also expected that students would not show mastery of literature interpretation and presentation on their first attempt.

Conclusions: Assignments in the course worked well, including an article presentation and exams. However, the course was changed to remove the comprehensive final as it was more relevant to emphasize the material in smaller "chunks" on each exam. Each exam is comprehensive in nature, requiring students to remember and apply previously learned material on each subsequent exam. As such, the data represents how students performed on Exams 1, 2, and 3 rather than a singular comprehensive final. This was a more successful way of assessing student performance than a singular attempt.

Plans for Next Assessment Cycle: Delete comprehensive final as instrument 1 and implement a new instrument, the final course project (presentation and paper). We feel this is a more appropriate artifact as it represents the students' ability to create content and present information using their own words rather than simply repeating content previously presented to them. Their efforts will require students to develop a 50-minute presentation on a topic not covered in class and an accompanying scientific paper.

Instrument 2 has changed from essay question assignments to a short article presentation wherein students chose a scientific article that relates to previously learned course material and expanded on what was learned from the instructor. The threshold for success should also adjust to 90% of students should score an 80% or better to describe success on the instrument.

Program Student Learning Outcome 3				
Program Student Learning Outcome	Students develop capacity as researchers and as practitioners who use evidence-based practices to develop and conduct a research project, as well as to implement, assess, and revise consumer-based exercise prescriptions and community health initiatives based on scientific advancements.			
Measurement Instrument 1	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 for Student Success	Students will score >/=80% on the research proposal.			
Program Success Target for this Measurement	Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 80% on the research proposal submission.		**Percent of Program Achieving Target**	6/6, 100%
Methods	Student enrollment for the Fall 2022, N=6. Students are instructed on all aspects of conducting research with human subjects and how to construct a research proposal from inception of idea to developing methodology. The course covers how to complete the CITI training, obtaining CPR/First Aid/AED training, obtaining bloodborne pathogen training, biosafety levels for diverse types of laboratories, how to identify a research topic/question, write an abstract, introduction, literature review, and construct/write a methodology. In turn, they take all this information and apply it by identifying a research topic, formulating a question, and writing up a research proposal including all sections.			
Measurement Instrument 2	Students will be assessed on their in-depth knowledge of the project and ability to talk about scientific research by putting their final project in a research presentation and presenting it to the class and the professor.			
Criteria for Student Success	Students will score >/=80% on the research proposal.			
Program Success Target for this Measurement	Our target is for >/= 80% of our students to attain the above criterion of a score of >/= 80% on the research proposal presentation.		**Percent of Program Achieving Target**	6/6, 100%
Methods	Student enrollment for the Fall 2022, N=6. Students are to integrate all aspects of the research proposal into a 20-minute research presentation for the class and the professor. They are to include background, purpose, methods, results, and discussion into the presentation.			
Measurement Instrument 3				
Criteria for Student Success				
Program Success Target for this Measurement			**Percent of Program Achieving Target**	
Methods				
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.			☒ **Met**	☐ **Not Met**
Results, Conclusion, and Plans for Next Assessment Cycle (Describe what worked, what didn't, and plan going forward)				

Results: Results demonstrate our graduate students are successful at completing the assessments with the desired/expected scores. Students all attended classes regularly, completed all assignments in a timely manner, and did well at taking what they were learning in the classroom and applying them to their final project (presentation and paper).

Conclusions: The plan of going through each section individually and writing/preparing that section as we went along (and grading it at that time) was successful. It allowed them not to be overwhelmed by the entire process but focus on each part or step as it came. This was my first time instructing the class so there were inherent changes to content with a new professor. However, the students learned and enjoyed the content. In fact, of the 6 students in the class, 5 have decided to do a Master's Thesis, many of which are based on their in-class projects. This suggests they gained an appreciation for the process and are interested in pursuing it further.

Plans for Next Assessment Cycle: The plan is to keep most aspects of the class similar since it was successful. The notion of allowing students to resubmit any section with appropriate revisions is going to continue as it not only strengthens the writing, but also adds to their abilities to take feedback and respond, which is what happens when writing papers in the field. Next course offering, the hope is to add some additional content on study design-related concepts and go into more detail on a few topics. I also plan to integrate writing and submitting an IRB proposal as part of the course (this was not required).

	LO1:	LO2:	LO3:	LO4:	LO5
	Interpret and apply advanced knowledge of the physiological influence of physical activity/exercise on health & fitness, sport performance, and clinical practice.	Students develop and demonstrate the skills needed to recognize, evaluate and prescribe solutions from an integrated and holistic approach regarding human movement, wellness, and performance	Students develop capacity as practitioners and researchers who use evidence-based practices to implement, assess, and revise consumer-based exercise prescriptions and community health initiatives based on scientific advancements	Successfully complete the ACSM (EP-C) and/or NSCA (CSCS) or any other nationally recognized certification exam	Students should be able to evaluatue the quality of research article, summarize the findings, and formulate an opinion on overall findings/message of research.
KIN 501- Research Methods		I			I
KIN 503- Advanced Motor Learning and Control	I	I	I		R
KIN 504- Advanced Exercise Physiology	I	I	I		R
KIN 512- Advanced Strength and Conditioning	R	R	I	I	
KIN 514- Laboratory Methods	R	R	I/R		I
KIN 518- Advanced Statistics in Kinesiology					I/R
KIN 522- Advanced Exercise Testing and Prescription	R	I/A	R	R	
KIN 523- Seminar in Exercise Physiology	M				M
KIN 524- Applied Biomechanics	I		R/M		R
KIN 596/599- Internship in Exercise Physiology/ Thesis Research	M	M	M	M	M/A

KIN 504 Course Project

Topic Selection and Article Distribution

- Each student will select a topic (pending instructor approval) to present to the class. The topic selected should be one with which the student has little familiarity.
- Two weeks before presentation: The articles and questions must be cleared by the instructor no later than one week prior to distribution to class members.
- One week before presentation: No later than one week prior to the presentation, the student will distribute a series of articles and questions to the instructor and class members.
- No later than the night of the presentation, students should supply the presentation material and at least 3 exam based questions (short answer) that would accompany your topic.

Teaching (Oral) Presentation

- The student should reveal a comprehensive knowledge of the topic.
- The presentation should be empirically-based, demonstrate the student's familiarity with the relevant literature, and focus on physiological mechanisms underlying response to various organ and body systems to exercise.
- Practical applications should be noted and discussed
- The presentation should follow the general format adopted by the instructor (e.g., whiteboard, LiteTouch, interactive presentation) and be a maximum of 35 minutes in length (no less than 25 minutes).

Topics could include (but are not limited to)

- Microgravity
- SARMs (selective androgen receptor modulators)
- Injury or muscle remodeling
- Thermal responses and control during exercise
- Exercise at altitude
- SCUBA diving
- Free diving
- Impact of anabolic steroids on myocardial tissue
- Diabetes and the athlete
- Gene doping

Course Project Rubric: Teaching Presentation

Name:

Topic Selected:

Total Points Earned:

pts	Criterion	Not Met (0%)	Partially Met, with Errors or Insufficiency (0.5%)	Meets Expectation (Full %)
5	**Preparation**: approval of topic, submission of articles and questions for approval two weeks prior to presentation, distribution of articles and questions to class members one week prior to presentation			
15	**Teaching style**: interaction with students, appropriate eye contact, not reading directly from slides, adequately answering student questions, providing ample time for note taking, providing articles and questions to students one week prior.			
15	**Knowledge**: demonstration of thorough knowledge of the subject matter and familiarity with the research literature.			
20	**Research**: incorporation of research citations and literature into presentation, appropriate discussion of article tables/figures, incorporation of assigned articles and reading questions into presentation.			
20	**Physiology**: appropriate discussion of physiological mechanisms underlying responses, discussion of both resting and exercise variables/responses, documentation of alterations in physiological response			
20	**Practical Applications**: review of applications that can be derived from the information, alterations from normal procedures/performance, special precautions			
5	**Time Frame** (25-30min). Start time: End time:			

Written Paper

Guidelines

- Submitted on the day of the presentation (or one week earlier for extra credit), the student will hand in a formal research paper on the chosen topic
- While no page length is assigned, the paper should provide a comprehensive examination of the chosen topic
- The paper must be typed, double-spaced, worthy of college graduate credit, and properly referenced. Consider using the freely available citation management tool, Zotero. Choose a reference style that is similar to that of a scholarly article you used in the paper. Zotero provides a style guide wherein you can download styles based from particular journals. If you wish, you may follow the style imposed by the International Journal of Exercise Science.

Basic Requirements

- Title page should include:
  - Title of your paper
  - Your name
  - Name of the peer that proof read your paper
  - Abstract and 3-5 keywords
  - Citations of the three most relevant articles
  - Which journal style your paper is following
- Margins: 1" on all sides
- Double spaced
- Times New Roman font (12 pt)
- The narrative should be 10-15 pages in length (a general guideline – but do not exceed 20 pages of narrative) (this does not include the title page or references).
- Reference page
- Spell check and edit your paper yourself. It should be read aloud by you and at least one peer before being submitted.
- Minimally rely on literature reviews as they are not primary in nature. Consider finding a review article that compiles primary articles as a start, but then reference the original research after reviewing it.

General Writing Guidelines

- Start with an introductory paragraph/section that describes the different sections of the paper and use headings for different sections throughout. Be consistent in your formatting.
- At the end of sections, supply a brief summary (1-3 sentences)
- Use the funnel approach (or inverted pyramid): start with subject matter that is more general in nature and progress toward material that is more specific.
- As you progress toward more specific material, this should coincide with material of more critical nature (e.g., research articles rather than books).
- Avoid devoting independent paragraphs to each cited reference or writing a laundry list. Your writing should be focused on topics rather than articles. Synthesize information from multiple sources that supports, contradicts, or sheds light on a particular point or statement.

- Vary your language. It becomes monotonous when each paragraph begins “Jones and Smith (2019) stated…” If you get bored reading it, so will your instructor.
- Avoid personal opinion. Do not use statements like “I believe, I wish, or I feel.”
- Back up critical statements and factual information with citations using the format selected.
- Write in the third person (do not use: I, me, my, us, our, we, etc.)

Course Project Rubric: Paper

Name:

Topic Selected:

Total Points Earned:

pts	Criterion	Not Met (0%)	Partially Met, with Errors or Insufficiency (0.5%)	Meets Expectation (Full %)
20	**Writing**: Was the paper well written (free of grammatical errors, spelling mistakes, followed formatting consistently, and provided clear ideas)? Was the reverse pyramid approach (general to specific) used? Was the length of the paper adequate to provide a comprehensive review of the topic area?			
10	**References**: Were citations provided to back up the writing? Were citations mostly from primary works (e.g., original research, meta-analysis). Were the citations consistent in formatting? Did every citation in the text also appear in the reference page? Was the reference page formatted according to the chosen style?			
20	**Background Information**: Cause and progression of the condition, alterations in normal function associated with (caused by) the condition, who is affected, how many are affected, what specific characteristics do individuals with the condition share?			
25	**Physiology**: Alterations at rest and during exercise, physiological mechanisms underlying responses, impact on performance, impact on function.			
25	**Practical Applications**: Review of applications that can be derived from the information, alterations from normal procedures/performance, special precautions			

KIN 504 Article Presentation

Each student pair will be assigned an article to present that relates to the content being covered at the time of presentation.

Presentation Expectations

- Give a background on the physiology necessary to understand the article
- Introduce the purpose of the article
- Give the main findings of the authors (data, figures, tables)
- Present how the article relates to the greater course discussion

Course Project Rubric: Presentation

pts	Criterion	Not Met (0%)	Partially Met, with Errors or Insufficiency (0.5%)	Meets Expectation (Full %)
15	**Teaching style**: interaction with students, appropriate eye contact, not reading directly from slides, adequately answering student questions, providing ample time for note taking, providing articles and questions to students one week prior.			
15	**Knowledge**: demonstration of thorough knowledge of the subject matter and familiarity with the research literature.			
20	**Research**: incorporation of research citations and literature into presentation, appropriate discussion of article tables/figures, incorporation of assigned articles and reading questions into presentation.			
20	**Physiology**: appropriate discussion of physiological mechanisms underlying responses, discussion of both resting and exercise variables/responses, documentation of alterations in physiological response			
20	**Practical Applications**: review of applications that can be derived from the information, alterations from normal procedures/performance, special precautions			
5	**Time Frame** (45-60 min). Start time: End time:			

Research Study Proposal Evaluation Rubric

Component	Fully met (3)	Met (2)	Partially Met (1)	Not met (0)	Score
Proposal overview	Effectively and insightfully develops a set of testable, supportable and impactful study hypotheses.	Develops a set of testable and supportable hypotheses.	Develops hypotheses.	Hypotheses are not testable or justifiable.	
Justification for hypotheses	The introduction section provides a cogent overview of conceptual and theoretical issues related to the study hypotheses. Demonstrates outstanding critical thinking.	The introduction section provides a logical overview of conceptual and theoretical issues related to the study hypotheses. Demonstrates competent critical thinking.	The proposal provides weak support for study hypotheses. Provides some evidence of sound critical thinking.	Very little support for the conceptual and theoretical relevant to the study hypotheses was provided. Provides little evidence of sound critical thinking.	
Supporting evidence	Provides clearly appropriate evidence to support position	Provides adequate evidence to support position	Provides inappropriate or insufficient evidence to support position	Provides little or no evidence to support position	
Review of relevant research	Sophisticated integration, synthesis, and critique of literature from related fields. Places work within larger context.	Provides a meaningful summary of the literature. Shows understanding of relevant literature	Fails to cite important or relevant scholarship. Misinterprets research findings.	Provides little or no relevant scholarship.	
Maintains purpose/focus	The proposal is well organized and has a tight and cohesive focus that is integrated throughout the document	The proposal has an organizational structure and the focus is clear throughout.	The proposal is somewhat focused or has minor drifts in the focus.	The document lacks focus or contains major drifts in focus	
Methodology • **Sample** • **Procedures** • **Measures**	Identifies appropriate methodologies and research techniques (e.g., justifies the sample, procedures, and measures). Provides appropriate justification for controls. Project is feasible.	Identifies appropriate methodologies and research techniques but some details are missing or vague.	Identifies appropriate methodologies and research techniques but many details are missing or vague. The methodology is largely incomplete.	The methodologies described are either not suited or poorly suited to test hypotheses. The methodology is under-developed and/or is not feasible.	

Grammar, clarity, and organization	The PowerPoint is well put together and ideas are well developed and explained. There is correct use of grammar. Bullet points are general ideas and not paragraphs. Visuals are used well.	The PowerPoint is well put together and ideas are well developed and explained. There is incorrect use of grammar. Bullet points have too much writing. Not many visuals.	The PowerPoint is somewhat disorganized and ideas not explained thoroughly. There is incorrect use of grammar. Bullet points have too much writing. Not many visuals.	The PowerPoint is disorganized and ideas not explained. There is incorrect use of grammar. Bullet points have too much writing. No visuals.	
References and citations	Properly and explicitly cited. Reference list matches citations	Properly cited. May have a few instances in which proper citations are missing.	The manuscript has several instances of improper use of citations. Contains several statements without appropriately citing.	The manuscript lacks proper citations or includes no citations.	
Presentation Skills	Presenter speaks clearly, smoothly, confidently. It is apparent that presenter understands his/her research project and is comfortable presenting material.	Presenter speaks clearly and confidently. The presenter appears to understand his/her research project for the most part and is comfortable presenting material.	Presenter speaks somewhat clearly. It is not clear if the presenter understands his/her research project.	Cannot understand presenter. Does not appear to understand research project. Presenter does not seem comfortable presenting material.	