Program: Exercise Science MA

College and Department: College of Education, Department of Exercise Science, Physical Education and Wellness

Contact: Christy Killman, Chairperson

Mission: The mission of the department of Exercise Science is to promote enhanced quality of life (wellness) and strengthen educational pursuits by creating, advancing, communicating and applying knowledge and skills, through innovative preparation of scholars, researchers, educators and professionals to meet the needs of a diverse society.

Mission Brief: Be prepared for service to enhance quality of life for a diverse society.

Vision: Prepare future professionals to be effective and engaged through clinical rich and evidenced based programs.

Program Goals

This program will prepare students to apply knowledge and skills in their chosen area of study to contribute to enhanced quality of life for themselves and a diverse society.

Student Learning Outcomes

1. TLW demonstrate understanding and application of content knowledge.

2. TLW complete CITI training with grade of 80% or higher.

3. TLW submit a final project containing a comprehensive literature review and recommendations for future study over a self-chosen topic.

A departmentally developed curriculum map can be found in Appendix 1 that shows the connections between courses and student learning outcomes.

Assessment Methods

1. *Comprehensive Exam.* During the final semester of study in the online Master of Arts degree in Exercise Science, each candidate must answer comprehensive exam questions to demonstrate understanding and application of content knowledge in each area: Core, Research and Concentration. Each question is constructed with multiple parts so that candidates can be comprehensive in their demonstration of understanding and application of the learning. A rubric created by full-time graduate faculty is provided to candidates ahead of time so that they know how their answers will be scored. Candidates are expected to score 80% or higher in order to pass the exam and be recommended for graduation. (sample questions and rubrics attached)

2. *CITI training.* Upon entering the MA program, students must take EXPW 6230 – Seminar in Exercise Science, which is an orientation to this graduate program, graduate school and research. As part of this course, students must complete the CITI (Collaborative Institutional Training Initiative) training module. Because CITI is dedicated to promoting trust in research, it

is essential for graduate students to understand the importance of that trust. In keeping with CITI scoring, students must complete the training with a score of 80% or higher to gain the assigned points for the course grade. Students have multiple opportunities to complete the training if needed.

3. *Research project.* During the research component of the MA program, there are 2 courses students must take, EXPW 6510 – Research Methods and EXPW 6520 – Research Project. As part of these 2 courses, students learn to search out peer reviewed research, articles and other, read and critique said items. Additionally, MA students identify a research topic, collect and critique current research related to that topic. For the final research project students construct a mini research project consisting of Abstract, Chapter 1 – Introduction, Chapter 2 – Comprehensive Literature Review, and Chapter 3 – Recommendations based on the review. This project is submitted in parts for feedback and then as a whole for a final grade and must meet the criteria established by the graduate faculty in the department and scored by the corresponding rubric. (rubric attached)

Results

1. *TLW demonstrate understanding and application of content knowledge.*

Comprehensive Exam – During AY '21-'22, a total of 29 records of comprehensive examination were submitted to the College of Graduate Studies. During fall 2021 eight of eight candidates passed the exam. In spring 2022, 11 of the 13 graduate candidates passed the comprehensive exam. The two who did not pass, retook the exam in summer '22 and passed. Seven students (in addition to the retakes) registered to take the exam during summer 2022, and all students who attempted the exam passed, but one student did not attempt the exam during the open period, and one student started but did not finish the exam, both of whom will take the exam in the fall '22 semester to graduate in December.
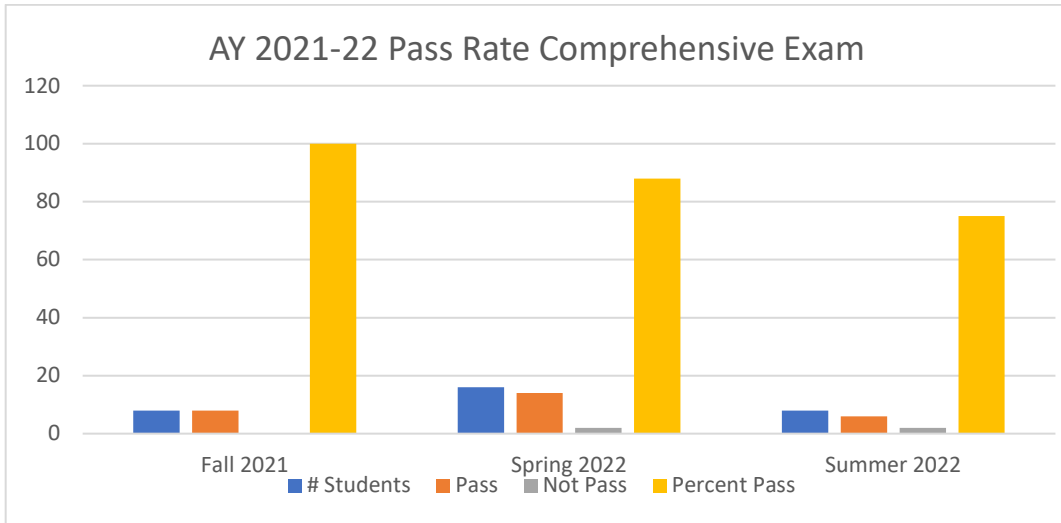
The answers on each of the separate questions are scored according to a rubric (attached) that is provided to the candidates ahead of time.

In comparing pass rates from this year to the previous year, the pass rate was down slightly each semester, with the exception of Fall 2021, when all candidates passed the exam on the first try. Over all, the pass rate has improved over the past few years.

Table 1

	# Students	Pass	Not Pass	Did not Attempt	Percent Pass
Fall 2021	8	8	0		100
Spring 2022	16	14	2		88
Summer 2022	9	7	1	1	88

Chart 1

AY 2021-22 Pass Rate Comprehensive Exam

Legend: # Students | Pass | Not Pass | Percent Pass
(Categories: Fall 2021, Spring 2022, Summer 2022)

2. TLW complete CITI training with grade of 80% or higher.

CITI training – Students in the EXPW 6230 class, as part of the curriculum, must pass the CITI training module with 80% accuracy or above. There were 17 students who took the course and completed the training during the 2021-2022 school year - 9 students in the fall section, 5 students in the spring section and 3 students in the summer section. 100% of the graduate candidates passed the CITI training with 80% or above accuracy. Even though students have multiple opportunities make the required passing score, this addition to the seminar course provides students with needed exposure to research concepts.
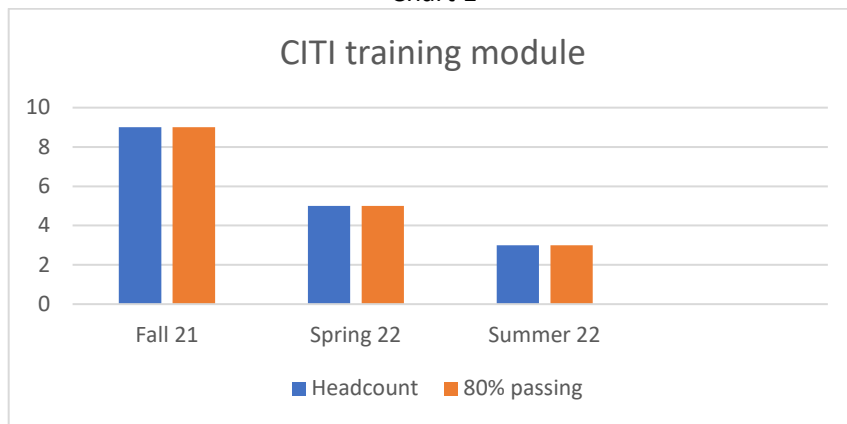
Chart 1

CITI training module

Legend: Headcount | 80% passing
(Categories: Fall 21, Spring 22, Summer 22)

Table 1

	Headcount	# 80% passing
Fall 21	9	9
Spring 22	5	5
Summer 22	3	3

3. *TLW submit a final project containing a comprehensive literature review and recommendations for future study over a self-chosen topic.*

Research Project – Graduate students must submit graduate quality work that is evaluated by a rubric (attached) designed to assess student ability and understanding of research. During the fall 2021 semester there were 12 students enrolled in EXPW 6520, all of whom completed the class and the research project with the grade of "B" or better. During the spring 2022 semester there were 9 students, all of whom completed the class and project with the grade of "B" or better, and 9 students who followed suit during the summer 2022 semester. The overall mean scoring for the academic year is below.
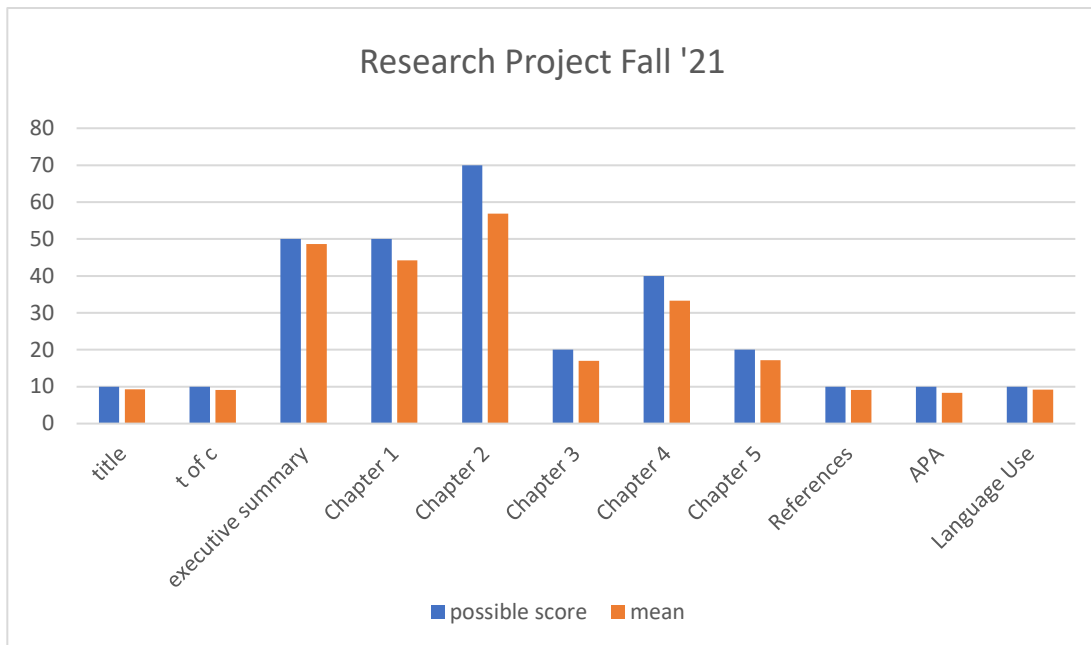
Chart 1

Table 1

Fall 21 - 12 students	possible score	mean
title	10	9.3
t of c	10	9.1
executive summary	50	48.6
Chapter 1	50	44.2
Chapter 2	70	56.9
Chapter 3	20	17
Chapter 4	40	33.3
Chapter 5	20	17.2
References	10	9.1
APA	10	8.3
Language Use	10	9.2

Chart 2

Research Project Spring '22

Legend: possible score (blue), mean (orange)
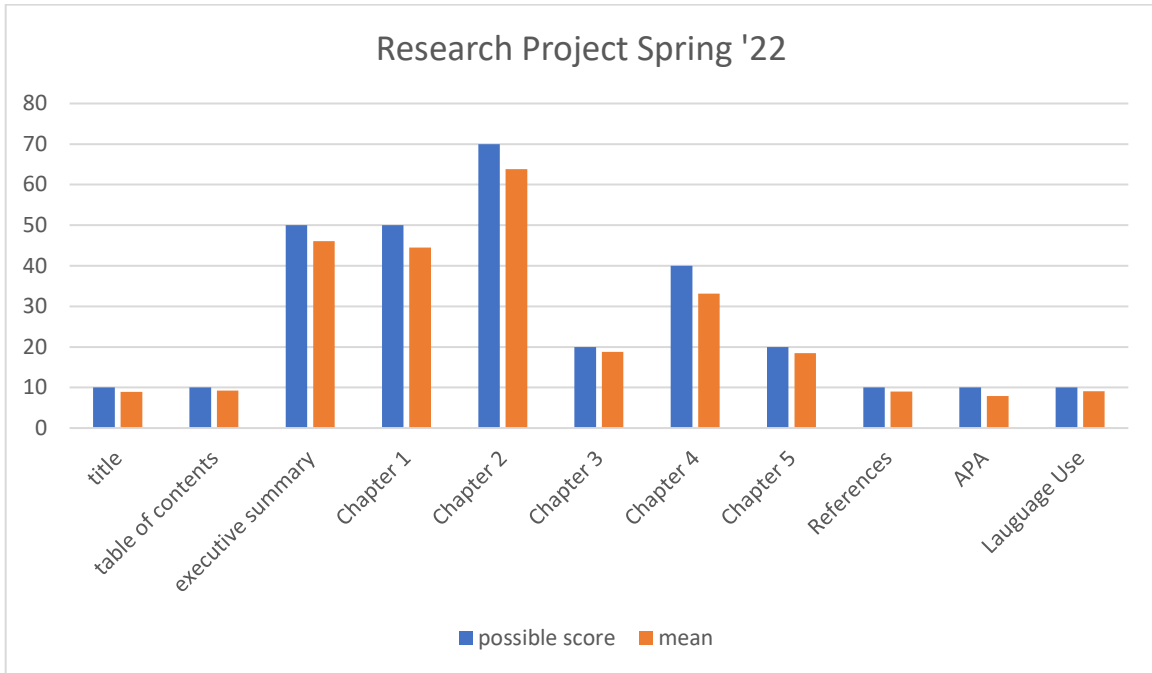
Table 2

Spring 22-9 students	possible score	mean
title	10	8.9
table of contents	10	9.2
executive summary	50	46.1
Chapter 1	50	44.5
Chapter 2	70	63.8
Chapter 3	20	18.8
Chapter 4	40	33.1
Chapter 5	20	18.5
References	10	9
APA	10	7.9
Language Use	10	9.1

Chart 3

Research Project Summer '22
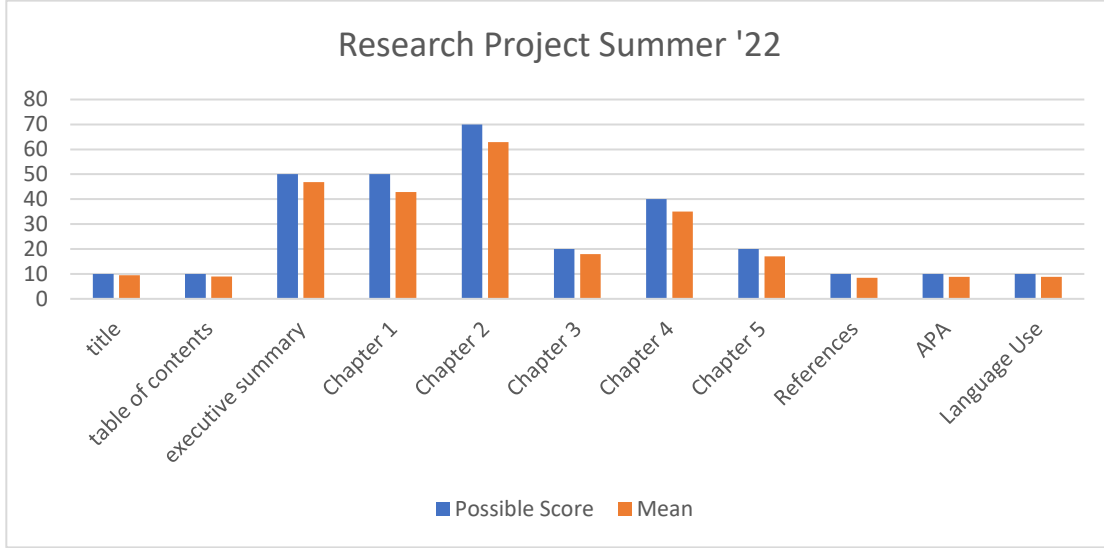
Table 3

Summer '22 - 9 students	Possible Score	Mean
title	10	9.5
table of contents	10	9
executive summary	50	46.8
Chapter 1	50	42.9
Chapter 2	70	62.9
Chapter 3	20	18
Chapter 4	40	35
Chapter 5	20	17
References	10	8.5
APA	10	8.9
Language Use	10	8.8

Modifications for Improvement

1. *Comprehensive Exam* – Because some students struggle with passing the comprehensive exam which assesses the student's understanding and ability to apply content knowledge from core, research and concentration areas, the graduate faculty is considering the following: (1) require a capstone project in each course that demonstrates understanding and ability to apply content/concepts from that course instead of administering a comprehensive exam {on-going}, (2) restructure the concentrations to include a capstone class that would also include demonstration of understanding and ability to apply research and core concepts instead of administering a comprehensive exam {on going}. Both of these options could be beneficial to students who suffer from testing anxiety. Additionally, changing the method of ensuring students can demonstrate understanding and application of content knowledge could benefit MA students who have heavy responsibilities other than being a student.

2. *CITI training* – Students are participating in the CITI training as part of the course EXPW 6230 – Seminar in Exercise Science. This training module was added because many students lack understanding of research, which this training provides. Because the expectation is in the first class all students take in the program, it provides a stronger foundation related to research as students move through their respective concentrations. Students are allowed to retake the training and quizzes until they score 80% or higher.

3. *Research Project* – Master of Arts candidates must complete a final project as part of the requirements for the degree. Because this project is directly linked to two of the courses in the program, students should be prepared to complete this requirement (which is one reason the CITI training was added). When students are in EXPW 6520, typically their last semester in the program, they spend the entire semester working toward one finished product that contains an extensive and thorough literature review over a topic that individual students pick for themselves. The goal is to review the literature and then be able to identify best practices and recommendations for future studies. Because students submit portions of the project throughout the semester to get feedback and recommendations from the instructor, the final projects, when subjected to the scoring rubric, are of above average and better quality. By submitting a quality piece of writing as the final project, after multiple opportunities for corrections and modifications, graduate candidates display traits necessary to be recommended for the MA degree in Exercise Science.

Appendices
1. Curriculum Map
2. Comprehensive Exam Rubric
3. Research Project Rubric

Appendix 1: Curriculum Map

Exercise Science MA

Course	Title	Goals/Learning Outcomes		
		Content Knowledge	Citi Training	Research Methods
EXPW 5940		X		
EXPW 6042		X		X
EXPW 6100		X		
EXPW 6140		X		X
EXPW 6230			X	X
EXPW 6210		X		
EXPW 6250		X		
EXPW 6350		X		
EXPW 6450		X		
EXPW 6510				X
EXPW 6520				X
EXPW 6710		X		X
EXPW 6720		X		X
EXPW 6730		X		X
EXPW 6740		X		
EXPW 6750		X		
EXPW 6760		X		

Appendix 2: Comprehensive Exam Rubric

Motor Learning, Health Promotion, Sport Management and Physical Education
Comprehensive Exam Rubric

	Exemplary - 3	Acceptable - 2	Developing - 1	Unacceptable - 0
Knowledge Base	Demonstrated thorough understanding of the Motor Learning principles. Discussed all portions of the question by providing foundational information about Motor Learning principles.	Demonstrated considerable understanding of the material. Discussed majority of the question and provided foundational information about Motor Learning principles.	Demonstrated some understanding of the material. Discussed some portions of the question and provided minimal foundational information about Motor Learning principles.	Demonstrated little understanding of the material. Did not discuss all portions of the question. Did not provide foundational information about Motor Learning principles.
Application of Knowledge	Application of Motor Learning principles used to **fully** answer questions.	Application of Motor Learning principles; **mostly** used to answer questions.	Application of Motor Learning principles used to **moderately** answer questions.	Does not use Motor Learning principles to answer questions.
Quality Writing	Demonstrated the ability to clearly and concisely answer each part of the question with a strong topic sentence and supporting sentences. No spelling or grammatical errors present.	Demonstrated the ability to clearly and concisely answer each part of the question with a strong topic sentence and supporting sentences. However, few spelling or grammatical errors present.	Demonstrated some ability to answer the questions, but did not have clear and concise answers. May not have had a proper paragraph. Some spelling and grammatical errors present.	Did not demonstrate ability to answer the questions with clear and concise answers. May not have had a proper paragraph. Several spelling and grammatical errors present.
Language Usage	Conventions of language are adhered to with great detail and precision, no errors found.	Almost all of the conventions are adhered to with detail and precision, no more than one error.	Greater attention to the conventions/mechanics are needed – work is borderline acceptable – has more than three errors.	Mistakes in conventions of language are too numerous to accept – major editing is needed.
APA Style	APA guidelines are meticulously followed.	Adhere consistently to APA guidelines, however, one error present	Demonstrates little ability to adhere to APA guild lines, more than three errors present	Adherence to APA guidelines is sporadic or non-existent; more than four errors present
References	Thoroughly supported responses with scholarly/peer-reviewed references and/or course materials. Reference sheet provided and correct.	Supported responses with scholarly/peer-reviewed references and/or course materials, but errors were present. Reference sheet provided and correct.	Intermittently supported responses with scholarly/peer-reviewed references and/or course materials, but more than two errors were present. Reference sheet provided, but not correct.	Did not support responses with scholarly/peer-reviewed references and/or course materials. No reference sheet.

Appendix 3: Research Project Rubric

Required Criteria	Possible Points	Earned Points
Title Page: Running head with Title in all caps; Project title; "submitted to" portion correctly included and spaced with date	10	
Table of contents: Correctly utilized the table of contents function with headings and subheadings; page numbers included and correct	10	
Executive Summary: Summary of topic including topic, purpose, questions, major findings, and implications for best practices; single spaced; in past tense	50	
Chapter 1 – Introduction: Project introduced clearly and concisely; includes background information, importance of the topic, and important concepts related to the topic; At least 5 sources of most relevant literature included; Minimum of 3 pages in length; Includes the following three sections: Purpose of the Project, Topic questions, Definitions of terms. Each section is elaborated with a clear purpose and reasoning for the project; topic questions well thought out and easy to read; terms defined from scholarly sources.	50	
Chapter 2 – Literature Review: An exhaustive and current review of the literature; Includes correct APA formatted in-text citations; Significance and innovation included.	70	
Chapter 3 – Methodology: A clear description of methods used in gathering and analyzing the data; how were articles gathered, which articles were included and why, how were best practices determined?	20	
Chapter 4 – Results (Implications for Effective Practice): Best practices are stated based upon research questions previously asked and answered; results are based in current literature; writing is clear and concise	40	
Chapter 5 – Discussion/Conclusion: The results are reflected upon and an interpretation of results is presented; conclusions are drawn from the literature for future research as well as indications of lacking research.	20	
References: All sources in the project are cited in a reference list in APA formatting	10	
APA: APA formatting is following throughout the paper; new section breaks are utilized for each section; headings and subheadings are utilized; proper font, spacing, and margins are used; in-text citations are correct	10	
Language Use/Spelling/Grammar: The project has been proofread and is free of grammatical and spelling errors; writing is completed in a third-person passive voice throughout the paper; overall, the paper "makes sense" and is the quality of a publishable paper	10	

Exemplary (all points earned): ALL criteria are met and exceeded basic requirements. This is free of all errors and no improvements are possible.

Acceptable (majority of points earned): MOST of the criteria is met, but the section is lacking or has errors. Improvement is needed.

Developing (some points earned): SOME criteria are included in the section, but the section is lacking and/or errors present. Improvement is necessary.

Unacceptable (few points earned): The minimum criteria are NOT met in the section. Many errors are present and the section is lacking. Significant improvement is necessary.