

George Mason University
College of Education and Human Development
Kinesiology

KINE 450 (003) —Research Methods
3 Credits, Spring 2020
T, R 10:30 – 11:45 AM, K. Johnson Hall 258 – SciTech Campus

Faculty

Name: Dr. Oladipo Eddo
Office Hours: By appointment
Office Location: 201B K. Johnson Hall
Office Phone: 703-993-7183
Email Address: oeddo@gmu.edu

TA name:
TA email:

Prerequisites/Corequisites

Sixty (60) credits and one of the following: STAT 250, DESC 210, OM 210, SOC 313, OM 250, or IT 250

University Catalog Course Description

Covers the development of empirical research designs for both practical and theoretical problems in allied health fields such as kinesiology, therapeutic recreation, and athletic training. Includes literature review of hypothesized relationships, and formulation of research proposals.

Course Overview

As this course has been designated “Writing-Intensive” (WI) – fulfilling in part the WI requirement for all kinesiology majors – you are required to complete at least 3,500 words of graded writing assignments. A series of writing exercises will be completed throughout the semester, thoroughly critiqued, and graded. Together, these will form the basis for your final research proposal. It is to your benefit to study and incorporate the comments given, as each assignment builds upon the next.

Course Delivery Method

The course is a mix of a lecture and discussion course. However, other approaches may be used to facilitate learning. This includes videos, demonstrations and in-class activities. Overall, this will be a highly interactive class and students will be encouraged to participate.

Learner Outcomes or Objectives

At the completion of the course, students should be able to:

1. Define and demonstrate appropriate use of research terminology;

2. Critically evaluate published research in scientific journals and the popular press;
3. Formulate research problem statements;
4. Enumerate the values inherent in the practice of scientific research;
5. Conduct a thorough review of literature and synthesize the findings; and,
6. Prepare a sound and feasible research proposal.

Professional Standards

Upon completion of this course, students will have met the following professional accreditation standards from:

*Council on Accreditation of Parks, Recreation, Tourism and Related Professions
(COAPRT):*

7.03	Students graduating from the program shall be able to demonstrate entry level knowledge about operations and strategic management in parks, recreation, tourism, and/or related professions
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Commission on the Accreditation of Athletic Training Education competencies met

PD 13	Describe and differentiate the types of quantitative and qualitative research and describe components and process of scientific research (including statistical decision-making) as it relates to athletic training research.
PD 14	Interpret the current research in athletic training and other related medical and health areas and apply the results to the daily practice of athletic training.
PD 4	Develop a research project (to include but not limited to case study, clinical research project, literature review) for an athletic training-related topic.

American College of Sports Medicine

1.3.14	Ability to obtain informed consent.
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Required Texts

Matthews T., D. & Kostelis K., T. (2011). *Designing and Conducting Research in Health and Human Performance*. Jossey-Bass.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

All assignments turned in on Blackboard.

Assignments and Examinations:

Quizzes – Unannounced short quizzes and exercises given in selected classes.

Exams – One examination given as a mid-term.

Research Proposal – The creation of a research proposal is a requirement of this course. The research proposal includes a series of tasks that will be thoroughly critiqued and graded. Together, these will form the basis for your research proposal. It is to your benefit to incorporate the comments given into your final research proposal. The guidelines and grading criteria for these tasks will be available on Blackboard and should be utilized to guide you for each assignment.

This course will be graded on a point system, with a total of 550 possible points via assignments.

	Points
Assignments – 60%	
#1 Topic Selection	25
#2 Article Review, Presentation & Discussion	50
#3 Introduction, Literature Review, Purpose Statement, Hypotheses	100
#4 Sample Plan (50)/Methods (50)	100
#5 Data Analysis Plan	75
#6 Presentation	100
#7 Final Research Proposal	100
Quizzes – 15%	168.75
Attendance/Participation – 5%	56.25
Exam – 20%	225
TOTAL	100%

Grading Scale

A = 94 – 100	B+ = 87 – 89	C+ = 77 – 79	D = 60 – 69
A- = 90 – 93	B = 84 – 86	C = 74 – 76	F = 0 – 59
	B- = 80 – 83	C- = 70 – 73	

Assignment Summaries

Note – All assignments will be due prior to the start of class on the day they are due. They should be submitted via Blackboard.

1. Topic Selection Assignment

The intent of this assignment is to encourage an early start on your research proposal including your topic selection and literature search.

2. Article Review and Presentation

The intent of this assignment is to increase your familiarity with quantitative evidence-based peer-reviewed journal articles. Select one of the articles you are planning to use for your research proposal. Read the article thoroughly. Summarize and critique the article. You will present (5 minutes) a summary of the key points from your article. This will serve as an opportunity to improve your oral communication.

3. Introduction and Review of Literature

The intent of this assignment is to apply your curiosity, in addition to your conceptual and practical understanding of your topic to asking questions and defining research problems. Specifically, you are to write an introduction to your research proposal, a specific statement of the problem, an integrated review of the pertinent literature, identification of variables, and testable hypotheses.

4. Sampling Plan and Methods

The intent of this assignment is to describe the population, the sampling design, and the target sample size appropriate for evaluating your hypotheses. In addition, you will identify the research design to be used, measurement tools available and detailing the data collection procedures. This

assignment also includes a discussion of how you would validate and confirm the reliability of your instrument, in addition to a discussion of the possible ethical problems and their solutions for your study

5. Analysis Plan

The intent of this assignment is to develop data analysis plan on how you would proceed to analyze your data if you were to conduct your proposed study. Your plan must include the appropriate descriptive and inferential statistics.

6. Presentation

The intent of this assignment is for you to share your research proposal with your colleagues via **1)** a 10-minute PowerPoint OR **2)** poster presentation. <https://library.gmu.edu/sparc> This assignment will allow you to gain experience in oral presentation skills. As part of the experience, your colleagues & I may ask questions about your study, and we will offer a summary critique intended to help you improve your final written proposal.

7. Final Research Proposal

The intent of this assignment is for you to apply your conceptual and practical understanding of your research topic to prepare a final and complete research proposal. Your proposal should illustrate your familiarity with problem formation and hypothesis development, review and critical analysis of the scholarly literature related to your study, justification of appropriate methodology, and consideration of the implications of your research. This assignment is a revision and extension of all content included in previous assignments.

Technology Use During Class

As per GMU policy, all sound emitting technology is required to be turned off during the class meeting time. No sound emitting technology (e.g., cell phones, smart phones, iPads, Tablets, pagers, etc.) is allowed at any time during the class period. Students who are observed using any form of technology inappropriately (e.g., sending text messages from cell phones, visiting social networking sites from laptops, etc) will be dismissed from class for the day, counted as an absence, and not permitted to make up missed assignments. Additionally, no laptop computers (e.g., netbooks, notebooks, etc.) will be permitted for use during class time unless with permission from the instructor.

Professional Dispositions

See <https://cehd.gmu.edu/students/polices-procedures/>

Students are held to the standards of the George Mason University Honor Code. You are expected to attend all class sections, actively participate in class discussions, complete in-class exercises and fulfill all assignments. Make-up tests, quizzes, assignments, or other grades will be granted for excused absences only. Excused absences include: serious illness, official university excused absences and extenuating circumstances. It is the student's responsibility to contact the instructor in order to obtain the make-up work. Assignments must be turned in at the beginning of class on the specified date due or **no credit will be given.**

Communication – When communicating with the instructor and classmates, either face-to-

face or via email (see below), students should address the other person with respect, use appropriate language, and maintain a pleasant demeanor. Students who fail to do may be asked to leave class, and will receive a grade of zero for all assignments or activities missed during that class period.

E-mail Correspondence - Messages must be in a professional format and originate from a Mason address:

Dear Dr. Eddo (*Beginning salutation*),
 I have a question regarding one of the assignments. (*Text body*)
 Respectfully, (*Ending Salutation*)
 Student's name (*Your name*)

Class Schedule

Date				Topic & potential in class assignments	Readings/Assignments Due
#1	T	Jan	21	Introduction to research methods	Ch. 1-2
#2	R	Jan	23	Information retrieval and problem development; Developing research topics	Ch. 2-3
#3	T	Jan	28	Current research examples and review	
#4	R	Jan	30	Ethical considerations in research	Ch. 8
#5	T	Feb	4	Problem statement presentation and overview; Matching questions with methods	
#6	R	Feb	6	Article summary presentations; Literature review	Proposal Topic Assignment
#7	T	Feb	11	Writing the introduction	Ch. 4
#8	R	Feb	13	Proposal development and sampling	Article Review Assignment
#9	T	Feb	18	Review of literature	Ch. 9
#10	R	Feb	20	Reliability and validity	Ch. 10
#11	T	Feb	25	Collecting credible data	Ch. 5
#12	R	Feb	27	Quantitative research methods	
#13	T	Mar	3	Qualitative research methods	Ch. 6

#14	R	Mar	5	Mixed research methods	Ch. 7 Intro/Lit Review Assignment
	T	Mar	10	Spring Recess	
	R	Mar	12	Spring Recess	
#15	R	Mar	17	Data analysis/statistics	Ch. 11-13
#16	T	Mar	19	Data analysis/statistics	
#17	R	Mar	24	Proposal data analysis planning	
#18	T	Mar	26	Proposal data analysis planning/Results and discussion	Sampling/Methods Assignment
#19	R	Mar	31	In-class workday	
#20	T	Apr	2	Results and discussion /Creating an abstract; Defending your research	Ch. 14-15
#21	R	Apr	7	Exam	
#22	T	Apr	9	Creating professional presentations/Peer review and critique	Analysis Assignment
#23	R	Apr	14	Research conferences and invited talks	
#24	T	Apr	16	Putting it all together	
#25	R	Apr	21	Presentations	Presentation Assignment
#26	T	Apr	23	Presentations	
#27	R	Apr	28	Presentations and feedback	
#28	T	Apr	30	<i>Final Proposals</i>	

There is no final exam. Final Research Proposal – Due: 10:30AM on Monday, May 4th

Note: The instructor reserves the right to make changes to the course syllabus and/or schedule at any time. Students will always be informed of any changes made

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing (see <https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/>

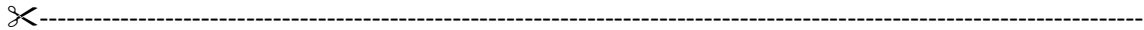
Student Acknowledgement of Syllabus

I, _____, by signing below, attest to the following:
(Print First and Last Name)

- *I have read the course syllabus for KINE 450 in its entirety, and I understand the policies contained therein. This syllabus serves as a binding contract for KINE 450 between the instructor and me.
- *I have a clear understanding of the due dates for assignments and examinations, and I accept responsibility for the material.
- *I am aware that failure to submit assignments by the dates assigned will result in no points awarded as late work will not be accepted.
- *I understand that if I am using emitting sound technology or personal computers I will be dismissed from class for the day, counted as an absence, and not permitted to make up missed assignments
- *I understand the instructor reserves the right to alter the provided schedules as necessary and I am responsible for the assignments and examination dates for the most current version of the syllabus schedule.
- *I accept responsibility for reading announcements that are sent to me via e-mail through BlackBoard/MyMason Portal; it is my responsibility to access my Blackboard/MyMason Portal e-mail for messages, or forward Blackboard/MyMason Portal e-mail as per the directions provided in the syllabus.
- *Points cannot be earned in this class until you have signed and handed this form to the instructor.

(Signature) (Date)

(Student Copy: This copy should remain attached to your syllabus)



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- *Points cannot be earned in this class until you have signed and handed this form to the instructor.

(Signature) (Date)

(Instructor Copy: Submit to the instructor at the end of the first class meeting)