

George Mason University
College of Education and Human Development
Masters in Kinesiology

KINE 605.001 – Research Methods in Kinesiology
3 Credits, Spring 2022
Tuesday Noon – 1:15 PM, ONLINE

Faculty

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

Prerequisites/Corequisites

Admission to the Kinesiology MS graduate program or approval of course instructor.

University Catalog Course Description

Introduces research methodology utilized in the field of Kinesiology to address important health issues related to physical activity across the lifespan.

Course Overview

An introduction to the basic principles of research methods in Kinesiology. Topics covered are research designs, measurement theory, evaluating research quality, reliability, validity, sampling and scientific writing principles specific to Kinesiology.

Course Delivery Method

This course will be delivered online (76% or more) using a synchronous format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on January 24th.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see:
https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers

To get a list of supported operation systems on different devices see:

https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a headset microphone for use with the Blackboard Collaborate web conferencing tool.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
 - Adobe Acrobat Reader: <https://get.adobe.com/reader/>
 - Windows Media Player:
<https://support.microsoft.com/en-us/help/14209/get-windows-media-player>
 - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- Course Week: Our course week will begin on Mondays and finish on Sundays.
- Log-in Frequency:
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least a minimum of 5 times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- Participation:
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:

Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.

- Instructor Support:

Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

- Netiquette:

The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

- Accommodations:

Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

1. Describe and explain differences in research designs commonly used in the kinesiology field.
2. Analyze the quality of peer-reviewed literature based on methodological approach in the kinesiology field.
3. Examine ethical issues associated with research in kinesiology.
4. Develop a research proposal with the appropriate methodology to address a specific research question in the field of kinesiology.
5. Evaluate peer-reviewed research studies and apply to practical applications in the field of kinesiology.

Required Texts

Arnold, BL, Schilling B (2017). Evidence-Based Practice in Sport and Exercise: A practitioner's guide to using research. FA Davis. ISBN-13: 9780803640283

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).

- **Assignments and Examinations**

Online Assignments & Quizzes: This class will utilize out of class assignments and quizzes to reinforce content covered during class. These will help students develop skills related to systematically evaluating literature and implementing an evidence-based practice. Unless otherwise noted these will be due prior to class as they are intended to help you prepare for class that week.

Article Presentation: Each student will present 1 research article during the semester. The article must be a research study from the reference list of your systematic review. Further details will be provided by the instructor.

Systematic Literature Review:

This assignment is the culminating project for the course and will require a final paper and a presentation. The assignment is designed to assist you with identifying, clarifying, and thoughtfully developing a research question and theoretical framework on an issue in the field of Kinesiology. The development of a systematic research literature review illustrates familiarity with problem, formation and hypothesis development, review and critical analysis of the scholarly literature, and consideration of the implications of research findings. This assignment is comprised of multiple smaller assignments each having a specified number of points and due dates that can be seen on the course schedule. The smaller assignments allow you to obtain feedback in order to improve your final submission.

IMPORTANT - This is a Program Assessment. DUE May 10, 2022.

Systematic Literature Review Presentation: The intent of this assignment is to develop your presentation skills and communicate your proposed research to your colleagues and professors. **Due May 3, 2022.**

- **Other Requirements**

Attendance

Students are expected to be on time, attend all online class meetings and be prepared for assignments and projects. Excused absences include the following: illness (must bring a receipt or note from a doctor), family death, athletic/academic event, and others at the discretion of the instructor. For known upcoming absences, students must contact the instructor at least one week in advance to the missed class to make up work. In the case of illness or some other unforeseen absence, the student must contact the instructor via e-mail or telephone. At the next attended class meeting the student will discuss material that is to be completed. It is the student's obligation to pursue any make-up work.

Participation

Students are expected to review assigned material (e.g., chapters, articles, video lectures) prior to class. Class will be based on discussion lead by the students and moderated by the instructor.

Academic Load

Although many students must work to meet living expenses, employment and personal responsibilities are not a consideration for missed classes, late or incomplete assignments, the course content, or the course schedule (see <http://catalog.gmu.edu>). Student employment does not take priority over academic obligations. I recognize that many students need to work in order to meet living expenses, however, there are distinct guidelines for students in terms of the number of credit hours which should be attempted based on how many hours per week a student has outside employment. For additional information on this subject, please see the GMU Academic Catalog (<https://catalog.gmu.edu/policies/academic/registration-attendance/>) for further information. Students who fail to observe these guidelines may expect no special consideration for academic problems arising from the pressures of employment.

Honor Code

Students are held to the standards of the George Mason University Honor Code (see <http://honorcode.gmu.edu> for details). Violations, including cheating and plagiarism, will be reported to the Honor Committee. Student assignments may be put through plagiarism detecting software.

Written Assignments

All assignments must be typed in Microsoft Word, and formatted as follows (*unless otherwise specified*): double spaced, 12 point Times New Roman font, 1 inch margins, your name and title in the running header at top left hand corner, continuous line numbers on left margin, and page numbers centered in footer. Failure to comply with any or all parts of this format will result in an unacceptable assignment, which corresponds to zero (0) points. If you do not submit your document in a Microsoft Word document (doc, docx) will be an unacceptable assignment, which corresponds to zero (0) points.

Pay close attention to spelling and grammar as these will count towards your grade on written assignments. American Medical Association Manual (AMA) of Style (11th edition) format must be used for all written work in this class (e.g., in referencing, creation of tables, and formatting headers for paper sections).

Assignments must be turned in on Blackboard/MyMason Portal by the beginning of class on the specified date due (*unless otherwise specified*). No late assignments will be accepted. It is recommended that students keep copies of all submitted work.

Course Material

A combination of approaches to assist your learning will be used. These include reading assignments and discussion of the reading, learning activities that provide practical experience in research methods, analyzing research examples, online activities, and homework preparing various elements of a research proposal. You are encouraged to ask questions about the assigned reading, followed by discussion and learning activities. This means you must read the material before the class! Be prepared to be called on at random regarding the readings.

E-mail Correspondence

Only messages that originate from a George Mason University address will be accepted. Please address the subject line for all email pertaining to this course as: *KINE 605: Last Name – purpose of email*. The following is an appropriate professional format:

Dr. Name (*Beginning salutation*)

I have a question regarding one of the assignments. (*Text body*)

Regards, (*Ending Salutation*)

(*Your name*)

Note: All email will be responded to in the order in which it is received. Students should allow 48 hours for a response.

• Course Performance Evaluation Weighting

<i>Assignments</i>		<i>% of Final Grade</i>	<i>Due Dates</i>
#1	Online Assignments & Quizzes	20%	See Syllabus
#2	Research Article Presentation	10%	TBD
#3	Systematic Literature Review	70%	May 10
	• Revisions to KINE 600 submission		
	• Evaluation of study quality		
	• Results		
	• Discussion		
	• Reference list		
	• PRISMA Checklist		
	Systematic Literature Review Presentation		May 3
TOTAL		100%	

• Grading

Grade	Percentage
A	94 – 100%
A-	90 – 93%
B+	88 – 89%
B	84 – 87%
B-	80 – 83%

C	70 – 79%
F	0 – 69%

Note: * Although a B- is a satisfactory grade for a course, students must maintain a 3.00 average in their degree program and present a 3.00 GPA on the courses listed on the graduation application.

Professional Dispositions

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

Students are expected to exhibit professional behaviors and dispositions at all times.

Class Schedule

Date		Suggested Activity for the Day	Chapter/Assignments Due
Module 1	Week 1 1/25	Synchronous Meeting – Tuesday @ noon Overview of Course & Research Methods	Buy Textbook / Chapter 1 Online Quiz Due
	Week 2 2/1	Synchronous Meeting – Tuesday @ noon Research Questions & Aims: Developing a Clinically Relevant Question – Research of Consequence!	Chapter 2 Online Quiz Due
Module 2	Week 3 2/8	Synchronous Meeting – Tuesday @ noon Synthesizing and Evaluating Research – Systematic Reviews, Meta-analyses and more!	Chapter 9 Online Quiz Due Article Presentation Title Due 2/8 @ Midnight
	Week 4 2/15	Synchronous Meeting – Tuesday @ noon <i>Article Presentation(s)</i> Evaluating Research Quality The Peer Review Process	Chapter 10 Online Quiz Due
Module 3	Week 5 2/22	Synchronous Meeting – Tuesday @ noon <i>Article Presentation(s)</i> Designing a Study – Types of Experimental Designs	Chapter 5 & 6 Online Quiz Due
		Importance of Reliability & Validity	

	Week 6	3/1	<p>Synchronous Meeting – Tuesday @ noon</p> <p><i>Article Presentation(s)</i></p> <p>Sampling</p>	
	Week 7	3/8	<p>Synchronous Meeting – Tuesday @ noon</p> <p><i>Article Presentation(s)</i></p> <p><i>Visually present study designs</i></p>	<p>Revisions to Prior Submissions Draft Due 3/8 @ Midnight</p>
Module 4	Week 8	3/15	<p><i>Spring Break</i></p>	<p>Rest up & Work Ahead</p>
	Week 9	3/22	<p>Synchronous Meeting – Tuesday @ noon</p> <p>Data Analysis: Matching research questions to your analyses</p>	<p>Chapter 3 & 4 Online Quiz Due</p>
	Week 10	3/29	<p>Synchronous Meeting – Tuesday @ noon</p> <p>Diagnostic Statistics</p>	<p>Chapter 7 Online Quiz Due</p> <p>Study Quality Draft Due 3/29 @ Midnight</p>
	Week 11	4/5	<p>Synchronous Meeting – Tuesday @ noon</p> <p>Data Presentation: Graphs, Tables, Figures</p>	<p>Results Outline Due 4/5 @ Midnight</p>
Module 5	Week 12	4/12	<p>Synchronous Meeting – Tuesday @ noon</p> <p>Epidemiological Research</p>	<p>Chapter 8 Online Quiz Due</p> <p>Results Draft Due 4/12 @ Midnight</p>

	Week 13	4/19	Synchronous Meeting – Tuesday @ noon Ethical Research – CITI Training IRB – Application & Consent Form	CITI Training Online Assignment Due 4/19 @ Midnight
	Week 14	4/26	Synchronous Meeting – Tuesday @ noon Research Proposals: Putting all the pieces together	Discussion Draft Due 4/26 @ Midnight
	Week 15	5/3	Synchronous Meeting – Tuesday @ noon	Presentations – noon to 2:00 pm
	<i>Finals</i>		Systematic Literature Review	Final Draft Due May 10 @ Midnight

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

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/>.