George Mason University College of Education and Human Development Kinesiology KINE 450.001 —Research Methods 3 Credits, Spring 2020 MW 10:30 – 11:45am, KJH 253

Faculty

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PREREQUISITES

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 health, fitness, and recreation resources management. Includes literature review of hypothesized relationships, and formulation of research proposals. Fulfills writing intensive requirement in the major.

COURSE OVERVIEW

Writing-Intensive Designation

As this course has been designated "Writing-Intensive" (WI) – fulfilling in part the WI requirement for HHP 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

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

LEARNING 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/ACCREDITATION 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 ab	le to demonstrate entry level knowledge about
	operations and strategic management in parks, rec	creation, tourism, and/or related professions

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

REQUIRED TEXTS/READINGS

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

SUPPLEMENTARY MATERIAL

Supplementary materials will be used in class and posted on Blackboard.

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 should be turned in on Blackboard.

EVALUATION:

	Points
Assignments:	
Topic Selection	25
Article Review & Presentation	50
• Intro, Lit Review, Purpose, Hypothesis	100
Sample Plan/Methods	100
Data Analysis	75
Presentation	100
Final Research Project	100
Quizzes (5 at 20 points each)	100
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DESCRIPTION OF EVALUATION:

Quizzes – Consisting of multiple choice, T/F, short answer and application questions. Will be given after major topic areas in class.

Assignments: This is a writing intensive course and many of your assignments will be writing focused. These assignments are to build upon each other and help you develop your final research project. More details about each assignment will be given during class time and on 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 peerreviewed 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 a 10minute PowerPoint presentation. 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.

Grading Scale

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\mathbf{A} +	4.0	=	97.0 & above
Α	4.0	=	93.0 - 96.9%
A-	3.7	=	90.0 - 92.9%
B +	3.3	=	87.0 - 89.9%
В	3.0	=	83.0 - 86.9%
B-	2.7	=	80.0 - 82.9%
C +	2.3	=	77.0 – 79.9%
С	2.0	=	73.0 - 76.9%
C-	1.7	=	70.0 - 72.9%
D	1.0	=	60.0 - 69.9%
F	0.0	=	0.0 - 59.9%

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.

Make-up Policy

- For every day an assignment is late 10% will be reduced from the grade received. (Ex: 30 point assignment = 3 points deducted)
- Exams missed due to unexcused absences will not be allowed a make-up exam.
- Make-up exams and assignments will only be offered for those who possess a University sanctioned excuse or doctor's note.

PROFESSIONAL DISPOSITIONS

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

Course Schedule

Week	Торіс	Assignments/Readings
1	Syllabus/Introduction/Types of Research	Ch. 1
	Information retrieval, problem development	Ch. 1-2
2	Labor Day – No classes	Ch. 2-3
	Current research examples Ethical considerations in research	Ch. 8 Proposal Topic Assignment
3	Quiz 1 Problem presentation, statement of the problem.	Ch. 3
	Article summary presentation & discussion	Article Summary Review Due
4	Proposal Development	
	Writing the introduction	Ch. 4
5	Review of Literature	
	Reliability & Validity	Ch. 10
6	Quiz 2 Quantitative research methods	Ch. 5
	Quantitative research methods	Review of Literature Due
7	Qualitative research methods	

	Qualitative research methods	
8	Spring Break	
	Spring Break	
9	Mixed Methods	Ch. 6
	Data analysis/Statistics	
10	Workshop/Meetings ROL	Ch. 7
	Quiz 3 Data Analysis/Statistics	Ch. 11-13
11	Data analysis statistics	
	Proposal data analysis planning	Sampling/Methods Assignment Due
12	Results Discussion	
	Results & Discussion	
13	Creating an abstract	Analysis Assignment
	Presenting you research	Ch. 14
14	Quiz 4 Final Proposal Review	
	Workshop/Catch Up	
15	Presentations	
	Presentations	
16	Presentations	

There is no final exam. Final Research Proposal - Due: Friday, May 8th

Note: The instructor reserves the right to make changes to the course syllabus and/or schedule at anytime. 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: <u>http://cehd.gmu.edu/values/</u>.

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.
 - Cell Phones: Texting and use of phones during class will not be tolerated.
 - Laptops: Use of laptops are permitted for note taking however if frequent misuse of laptops is identified loss of this privilege for the whole class will occur.
 - Texting or use of Smart Watches during an exam is not permitted, and warrants immediate disciplinary action, and a zero grade for that exam.
 - If you have an emergency and your cell phone needs to be on please inform the professor at the beginning of the class.

Campus Resources

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

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 <u>titleix@gmu.edu</u>.

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