George Mason University College of Education and Human Development

Kinesiology

KINE 450 (002) —Research Methods 3 Credits, Fall 2016 T, R 10:30 – 11:45 AM, Bull Run Hall 253 – SciTech Campus

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 all HFRR 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 able to de	monstrate entry level knowledge about
	operations and strategic management in parks, recreation	, 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

1.3.14	Ability to obtain informed consent.

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.**

Assignments and Examinations:

Quizzes – Unannounced Short quizzes and exercises may be given in selected classes.

Exams – One examination shall be 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.

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	50			
#3 Introduction, Lite	rature Review, Purpose Statement, Hypotheses	100			
#4 Sample Plan (50)	Methods (50)	100			
#5 Data Analysis Pla	n	75			
#6 Presentation		100			
#7 Final Research Pr	roposal	100			
Quizzes – 15%					
Attendance/Participation – 5%					
Exam - 20%					

TOTAL 100%

Grading Scale

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

Assignment Summaries

Note – All assignments will be due <u>prior to the start of class on the day they are due</u>. 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 a 10-minute 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.

PROFESSIONAL DISPOSITIONS

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**.

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 University Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).
- Students must follow the university policy for Responsible Use of Computing (see http://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 http://ods.gmu.edu/).
- Students must follow the university policy stating that all sound emitting devices shall be silenced 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/api/tk20. Questions or concerns regarding use of Blackboard should be directed to http://coursessupport.gmu.edu/.
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see http://writingcenter.gmu.edu/).
- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance (see http://caps.gmu.edu/). Template Revision Date: August 2016 3
- The George Mason University Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to http://studentsupport.gmu.edu/, and the OSS staff will follow up with the student.

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

Academic Integrity

GMU is an Honor Code University; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated

gravely. What does academic integrity mean in this course? First, it means that when you are responsible for a task, you will be the one to perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives and traditions. When in doubt, please ask for guidance and clarification.

TENTATIVE COURSE SCHEDULE

Date			-	Topic & potential in class assignments	Readings/Assignments Due
#1	Т	Aug	30	Introduction to PRLS	Ch. 1-2
#2	R	Sept	1	Information retrieval and problem development; Developing research topics	Ch. 2-3
#3	Т	Sept	6	Current research examples and review	
#4	R	Sept	8	Ethical considerations in research	
#5	Т	Sept	13	Problem presentation and overview; Matching questions with methods	Proposal Topic Assignment Ch. 8
#6	R	Sept	15	Article summary presentations; Literature review	
#7	Т	Sept	20	Writing the introduction	Ch. 4
#8	R	Sept	22	Proposal development and sampling	Article Review Assignment
#9	Т	Sept	27	Review of literature	Ch. 9
#10	R	Sept	29	Reliability and validity	Ch. 10
#11	Т	Oct	4	Collecting credible data	
#12	R	Oct	6	Quantitative research methods	Ch. 5
	Т	Oct	11	Columbus Day Recess	
#13	R	Oct	13	Qualitative research methods	Intro/Lit Review Assignment Ch.
#14	Т	Oct	18	Mixed research methods	Ch. 7
#15	R	Oct	20	Data analysis/statistics	Ch. 11-13
#16	Т	Oct	25	Data analysis/statistics	

#17	R	Oct	27	Proposal data analysis planning	
#18	Т	Nov	1	Results and discussion	Sampling/Methods Assignment
#19	R	Nov	3	Creating an abstract; Defending your research	Ch. 14-15
#20	Т	Nov	8	Exam 1	
#21	R	Nov	10	Creating professional presentations	Analysis Assignment
#22	Т	Nov	15	Peer review and critique	
#23	R	Nov	17	Research conferences and invited talks	
#24	Т	Nov	22	Putting it all together	
	R	Nov	24	Thanksgiving	
#25	Т	Nov	29	Presentations	Presentation Assignment
#26	R	Dec	1	Presentations	
#27	Т	Dec	6	Presentations and feedback	
#28	R	Dec	8	Research Challenge	
#29	Т	Dec	13	Final Proposals	Final Proposal Due

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

