GEORGE MASON UNIVERSITY  
School of Recreation, Health, and Tourism  

PRLS 450-002—Research Methods (3)  
Spring 2011  

DAY/TIME: TR 10:30 – 11:45 a.m.  
LOCATION: Bull Run Hall 259  
PROFESSOR: Dr. Nelson Cortes  
EMAIL ADDRESS: ncortes@gmu.edu  
OFFICE LOCATION: Bull Run Hall 210  
PHONE NUMBER: 703-993-9257  
OFFICE HOURS: TR: 3:00 – 4:00 p.m. or by appointment  
FAX NUMBER: 703-993-2025  

PREREQUISITES: 60 credits and STAT 250, DESC 210, OM 210, SOC 313, OM 250, or IT 250.  

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.  

COURSE 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 and sound and feasible research proposal.  

Further, upon completion of this course, students will meet the following professional accreditation standards:  

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<thead>
<tr>
<th>Council on Accreditation of Parks, Recreation, and Tourism Related Professions standards met</th>
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<td>8.14.0</td>
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<td>Evaluation of programs/events.</td>
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<td>Ability to apply basic principles of research and data analysis related to recreation, park resources, and leisure services.</td>
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<td>Ability to utilize the tools of professional communication.</td>
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<td>Ability to apply current technology to professional practice.</td>
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<td>Understanding of and ability to apply techniques of program evaluation and policy analysis which measure service effectiveness and the extent to which programmatic and organizational goals and objectives have been achieved.</td>
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<tr>
<th>Commission on the Accreditation of Athletic Training Education competencies met</th>
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<tr>
<td>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.</td>
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<td>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.</td>
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<tr>
<td>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.</td>
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**READINGS:**

- Additional various readings/articles assigned
- Websites and handouts as provided in class

**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.

**COURSE OVERVIEW:**

1) **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.

2) **Attendance and Participation** – Class attendance, class participation, and on-line participation is mandatory. Attendance will be taken during each class session. Arriving to class late or leaving early will be counted as an absence. If you miss a class, for any reason, it is your responsibility to obtain the information about announcements, assignments, lectures, and course content covered during the missed class.

3) **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).

Last revised on January 10, 2011
4) **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.

5) **Written Assignments** – All assignments must be typed. Pay close attention to spelling and grammar, as these will count toward your grade on written assignments. APA (American Psychological Association, 6th 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). Some degree programs frequently use the American Medical Association Manual (AMA) of Style (10th edition). The AMA manual may be used as a replacement for the APA manual in this course. **Assignments must be turned in on Blackboard by the beginning of class on the specified date due. No late assignments will be accepted.** It is recommended that students keep copies of all submitted work.

**GENERAL EDUCATION OUTCOMES:**

Written communication is one of the foundation requirements of Mason’s general education curriculum. Mason’s nationally recognized writing program emphasizes writing as a process: it is not simply a way of communicating already formulated thoughts, but a way of discovering, exploring and developing new ideas. On your way to completing you proposal, you will go through the recursive processes of researching, drafting, and revising and will engage in critical thinking at all stages.

As part of the written communication component and in addition to our course objectives, upon successfully completing this course, you will be able to:

- Analyze and synthesize research using methods appropriate to Recreation, Health, and Tourism (RHT);
- Make reasoned, well-organized arguments with introductions, thesis statements, supporting evidence, and conclusions appropriate to RHT;
- Use credible evidence to include, as applicable, data from credible primary and/or secondary sources, integrated and documented accurately according to APA or AMA styles;
- Employ rhetorical strategies suited to the purpose(s) and audience(s) for the writing, to include appropriate vocabulary, voice, tone, and level of formality;
- Produce writing the employs the organizational techniques, formats, and genres typical to RHT; and,
- Produce writing that demonstrates proficiency in standard edited American English, including correct grammar/syntax, sentence structure, word choice, and punctuation.

(For additional information, please see [https://assessment.gmu.edu/Genedassessment/outcomes.cfm](https://assessment.gmu.edu/Genedassessment/outcomes.cfm))
EVALUATION

Quizzes - Short quizzes and exercises will be given on Blackboard or in class. Each quiz and exercise is worth 10 points; your highest 15 scores will count toward your final grade. Students are required to check Blackboard daily for quizzes and exercises.

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 830 possible points.

Requirements Points
Assignments
#1 Topic Selection 30
#2 Article Review 50
#3 Introduction, Literature Review, Problem Statement, Hypotheses 60
#4 Sampling Plan 50
#5 Methods 60
#6 Data Analysis Plan 60
#7 Presentation 90
#8 Final Research Proposal 200
Participation/Quizzes 150
Attendance 80
TOTAL 830

Grading Scale
A+ = 98 – 100 B+ = 88 – 89 C+ = 78 – 79 D = 60 – 69
A = 94 – 97 B = 84 – 87 C = 74 – 77 F = 0 – 59
A- = 90 – 93 B- = 80 – 83 C- = 70 – 73

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

Article Review
The intent of this assignment is to increase your familiarity with evidence-based peer-reviewed journal articles. Select one of the articles that you are planning to use for your research proposal. Read the article thoroughly and respond to each of the following using complete sentences (bulleted responses are not acceptable for this course):

a. What was the topic studied?
b. What procedures were used to gather data?
c. Who were the participants?
d. What scales or instruments were used?
e. What was the method of data analysis?
f. What were the major conclusions and implications?

Introduction, Problem Statement, Lit Review, Hypothesis Variables
The intent of this assignment is to apply your curiosity, conceptual and practical understanding of health, fitness and recreation resources to asking questions and defining research problems. This assignment will benefit you in developing an awareness of research potential in your field of interest and planning for your final research proposal. Specifically, you are to write an introduction to your research proposal and your preliminary review of literature AND submit a copy of each research article used in the review. The literature review will include:

- An introduction to the specific topic to be investigated in your study (including the background and significance of the problem);
- A specific statement of the problem (which could be the last sentence in your introduction);
- An integrated review of pertinent literature (at least 15 current, evidence-based/empirical and peer-reviewed research articles – do not confuse these with articles from newspapers which are NOT empirical nor peer-reviewed);
- Should be a minimum of four pages long;
- Two testable hypotheses regarding the outcome of your study; and
- Identification of your independent and dependent variables and definitions in each of your hypotheses.

Sampling Plan
Having selected a problem, formulated a hypothesis and completed a preliminary literature review, describe a sample appropriate for evaluating your two hypotheses. This assignment is to be written in proposal format and should be specific to your PROPOSED full study. Include:

- A complete definition of the target and accessible populations from which the sample would be drawn. This definition should thoroughly describe the size of these populations and relevant characteristics (e.g., age, ability, socioeconomic status, injury status, activity level, etc.). This is based on your PROPOSED study.
- A description of how you will determine the sample size. Include a summary statement that indicates the sample size that will be selected and justification for this size.
- An explanation of the procedural techniques by which you would select the sample and form it into groups (if appropriate). This technique should be described in detail, including justification of the technique selected. For example, if using “stratified sampling”, do not just say that stratified sampling will be used; indicate on what basis (i.e. characteristic) the population will be stratified and how group members (and how many) will be selected.
- Indicate the possible sources of sampling bias.

Research Design, Measurement
The intent of this assignment is to continue development of the research proposal, specifically identifying the research design to be used, measurement tools available and detailing the data collection procedures. Having selected a problem, formulated a hypothesis, completed a preliminary literature review, and described your population and sample, IDENTIFY THE MEASURES AND DATA COLLECTION PROCEDURES TO BE USED IN THIS STUDY. This assignment is to be written in proposal format. You are to address the following:

- Briefly explain the sources for questions to be used in the survey and how you would validate and confirm the reliability of your instrument. In other words, if you plan to use one or more already existing instruments, describe each.
- Explain, as well, how you plan to check the validity and reliability of scores obtained with your instruments. If you plan to use an existing instrument, summarize what you have been able to learn about the validity and reliability of previous results.
- Identify and describe the research design to be used in this study (go back to your reading on “Research Designs”). Describe why the design was selected; potential threats to internal validity (e.g., subject characteristics, location, instrumentation, maturation, subject attitude, implementation) and how you have designed the study to minimize the potential effects of these threats.
- Describe the procedural technique(s) by which you would collect the data for a complete study (e.g., structured face-to-face or telephone interviews; mail, fax or email surveys; pre/post). The specific data collection technique(s) should be described in detail (when, where, how long, etc.). Indicate the exact
procedures for how you will make contact with subjects and the advantages and disadvantages of your chosen method of collection. Justify why you selected the technique you did.

- Identify any possible ethical problems in carrying out such a study and how the problems could be remedied. Be sure to include: possible harm to participants (if any); possible problems of confidentiality (if any); and possible problems of deception (if any).

Data 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. You will be expected to:

I. Provide information about which descriptive statistics and what type of graphical and/or tables would you use to present your descriptive analysis.

II. Develop a plan for inferential analysis of your data. Include a discussion of the appropriate statistics and variables to be used to assess your hypothesis. It would also be appropriate to plan some inferential analyses of variables that would be interesting to your audience.

Research Presentation & Handout
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 and will help to improve your final written proposal. As part of our experience, we (your colleagues & I) will offer summary critiques of your presentations and may ask questions about your study.

- Introduce the topic, research problem and its significance to theory and practice (including reference to pertinent literature)
- Identify your two hypotheses and the relevant variables
- Identify the potential limitations and delimitations of this proposed study
- Define the population of interest and how your proposed large sample will be drawn
- Describe the data analysis plan
- Discuss the potential results and implications of your study in your related field

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.
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignment Due Date</th>
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<tbody>
<tr>
<td>Jan 25</td>
<td>Introduction to PRLS450</td>
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<td>Jan 27</td>
<td>Developing Research Topics &amp; Literature Reviews</td>
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<td>Feb 1</td>
<td>Examples of Recreation, Health, and Tourism Research</td>
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<td>In-Class Workday – Proposal Topic Assignment</td>
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<td>Feb 3</td>
<td>Research Ethics</td>
<td>Proposal Topic Assignment</td>
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<td>Feb 8</td>
<td>Understanding Publication Guidelines &amp; Scientific Writing</td>
<td>Proposal Topic Assignment</td>
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<td>In-Class Workday – Article Review Assignment</td>
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<td>Feb 10</td>
<td>Overview of Qualitative &amp; Mixed Methods Research Designs</td>
<td>Article Review Assignment</td>
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<td>Feb 15</td>
<td>Overview of Quantitative Research Designs</td>
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<td>Feb 17</td>
<td>Developing Hypotheses &amp; Conceptualizing Variables</td>
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<td>Feb 22</td>
<td>In-Class Workday – Proposal Introduction Assignment</td>
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<td>Feb 24</td>
<td>Selecting a sample: how many participants do I need?</td>
<td>Proposal Introduction Assignment</td>
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<td>March 1</td>
<td>In-Class Workday – Proposal Sampling Plan Assignment</td>
<td>Proposal Sampling Plan Assignment</td>
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<td>March 3</td>
<td>Conceptualization and Measurement</td>
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<td>Data Collection Tools</td>
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<td>March 8</td>
<td>Conducting a Pilot Test – How to Prepare for Data Collection</td>
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<td>March 10</td>
<td>In-Class Workday – Proposal Methods Assignment</td>
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<td>March 15</td>
<td><em>No Class – Spring Break</em></td>
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<td>March 17</td>
<td><em>No Class – Spring Break</em></td>
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<td>March 22</td>
<td>Introduction to SPSS</td>
<td>Proposal Methods Assignment</td>
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<td>March 24</td>
<td>Data Manipulation in SPSS</td>
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<td>March 29</td>
<td>Constructing SPSS Data Files</td>
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<td>March 31</td>
<td>Descriptive Statistics</td>
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<td>April 5</td>
<td>In-Class Workday – Proposal Data Analysis Plan Assignment</td>
<td>Proposal Data Analysis Plan Assignment</td>
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<td>April 7</td>
<td>In-Class Workday – Proposal Data Analysis Plan Assignment</td>
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<td>April 12</td>
<td>Giving a Professional Presentation</td>
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<td>Pulling Together Your Final Proposal</td>
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<td>April 14</td>
<td>In-Class Workday – Presentations &amp; Proposal Corrections</td>
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<td>April 19</td>
<td>In-Class Workday – Student Presentations</td>
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<td>April 21</td>
<td>Student Presentations &amp; Feedback Session</td>
<td>ALL PRESENTATIONS DUE</td>
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Last revised on January 10, 2011
April 26  Student Presentations & Feedback Session
April 28  Student Presentations & Feedback Session
May 3    Student Presentations & Feedback Session
May 5    In-Class Workday – Final Proposals
         Where do we go from here? – Inferential Statistics
May 12   Final Proposals (Due at 5PM)

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.

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See http://academicintegrity.gmu.edu/honorcode/].

- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See http://ods.gmu.edu/].

- Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/1301gen.html].

- Students are responsible for the content of university communications sent to their George Mason University 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 must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

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

Campus Resources

- 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/].

- 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/].

- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See http://rht.gmu.edu].