George Mason University College of Education and Human Development Sport and Recreation Studies

SRST 450 – 002 – Research Methods 3 Credits, Fall 2019 Wednesdays 4:30 – 7:10pm – Recreation Athletic Complex 2203

Faculty

Instructor:	Ivan Levin, M.S.
Office:	N/A
Office Hours:	By Appointment
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Phone Number:	540-818-5818 (9am-10pm Call or Text)

Prerequisites

60 credits and STAT 250*, DESC 210*, OM 210* or IT 250*. *Requires minimum grade of C.

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. Offered by Recreation, Health, & Tourism. May not be repeated for credit. **Specialized Designation:** Fulfills writing intensive requirement in the major.

Course Overview

This course is a designated "Writing Intensive" (WI) – fulfilling, in part, the WI requirements for all AT, HFRR and TEM majors – therefore, each student will complete at least 3,500 words of graded writing assignments. To help make this a manageable task, we divided the course into 5 smaller writing exercises that you will complete over the semester. These will be critiqued, graded, and will form the basis for your final Research Proposal.

For this course, you can choose to follow the guidelines of either the *Publication Manual of the American Psychological Association* (APA) (6th Edition) or the *American Medical Association* (10th Edition).

Communication is an important facet of this course. As such, I ask that you **email** for messages and updates. Keep a special eye out for weather related announcements!

Everyone is expected to attend all class sessions, actively participate in class discussions, complete in-class exercises, and fulfill all assignments.

Course Delivery Method

This course will be delivered using a face to face lecture methods

Learner Objectives and Outcomes

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.

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 your 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)

Professional Standards

Upon completion of this course, students will meet the following professional accreditation standards from the Council on Accreditation of Parks, Recreation, Tourism and Related Professions (COAPRT):

7.02 Students graduating from the program shall be able to demonstrate the ability to design, implement, and evaluate services that facilitate targeted human experiences and that embrace personal and cultural dimensions of diversity.

Required Text

Riddick, C. C., & Russell, R. V. (2015). *Research in recreation, parks, sport, and tourism* (3rd ed.). Champaign, IL: Sagamore Publishing.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor.

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy). This course will be graded on a percentage system for a total of 100% distributed as follows:

• Assignments and Examinations

Article Review & Research Classification	5%
Introduction, Problem Statement, Lit Review, Hypothesis, Variables	15%
Sampling Plan	10%
Research Design, Measurement and Data Collection	15%
Analysis Plan	10%
Research Presentation	10%
Final Research Proposal (This is a Performance Based Assessment)	20%
Class Participation (attendance, in-class exercises)	<u>15%</u>
TOTAL	100%

***NOTE – FULL ASSIGNMENT DESCRIPTIONS WITH GRADING RUBRICS ARE POSTED ON BLACKBOARD Assignment Summaries

Article Review & Research Classification (5%)

The intent of this assignment is to increase your familiarity with evidence-based peer-reviewed journal articles. Select **one** of the articles posted on <u>http://courses.gmu.edu</u> in our "Assignments" folder. Read the article thoroughly and respond to each of the following <u>using complete sentences</u> (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 (15%)

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:

- a. An **introduction** to the specific topic to be investigated in your study (including the background and significance of the problem);
- b. A specific statement of the problem (which could be the last sentence in your introduction);
- c. An integrated **review of** pertinent **literature** (*at least 5 current*, evidence-based/empirical and peerreviewed research articles – do not confuse these with articles from newspapers which are NOT empirical nor peer-reviewed);
- d. **<u>TWO</u>** testable **hypotheses** regarding the outcome of your study; and
- e. **Identification of** your independent and dependent **variables and definitions** in each of your hypotheses.

Sampling Plan (10%)

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 (NOT your Pilot Study of 20 people that will happen shortly). Include:

- A complete definition of the target and accessible populations from which the sample would be drawn. This definition should **thoroughly describe** the <u>size</u> of these populations and <u>relevant characteristics</u> (e.g., age, ability, socioeconomic status, etc.). This is based on your PROPOSED study.
- b. 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. Be sure to identify your anticipated response rate and cite your source!
- c. 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.
- d. Indicate the possible sources of sampling bias.

Research Design, Measurement & Data Collection (15%)

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 <u>detailing</u> 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 AND DESIGN AN APPROPRIATE COVER LETTER AND SURVEY INSTRUMENT.** This assignment is to be written in proposal format (with cover letter and instrument in appendices). You are to address the following:

Measurement, Design and Data Collection

- I. 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 scales or measures, describe each. Explain, as well, <u>how</u> 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.
- II. 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, and implementation) and how you have designed the study to minimize the potential effects of these threats.
- III. 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.
- IV. 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).

Instrument and Cover Letter Development

Develop an appropriate cover letter written to your theoretical participants that will reference the collection procedures you have determined. This letter <u>must include</u>, but is not limited to the following:

- a. Letterhead, date, name and address, greeting, signature and title;
- b. What the study is about and why it is useful;
- c. Why the recipient is important and why they should complete your questionnaire;
- d. A promise of confidentiality or anonymity and an explanation of a numbering system if used; and,
- e. Assurance that the information will be used, incentives that will be given, if appropriate, and a thank you.

Analysis Plan (10%)

The intent of this assignment is to develop a plan for analysis of survey data. Having developed a survey instrument by which to collect your data (Assignment #4), you are to conduct a pilot study and write about it. Specifically, you are to:

- I. Distribute your questionnaire to 20 people [similar to those you hope to study] and input the data in SPSS.
- II. Analyze all variables using appropriate <u>descriptive</u> statistics and write up the results. In this case, you will be analyzing more than just the variables you are using to test your hypothesis. You should <u>provide at least 2 Tables and 1 Figure</u> accompanying your data descriptions. In your text, highlight the key information in those Tables/Figures.
- III. Analyze all appropriate variables and relationships using appropriate <u>inferential</u> statistics and write up the results. Include a discussion of the appropriate statistics and variables to be used to assess your hypothesis. A minimum of 5 statistical tests must be performed using chi-square, t-test and correlations to determine if relationships exist.

Research Presentation (10%)

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 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 <u>proposed</u> large sample will be drawn (i.e., size of sample, method of sampling)
- Describe the ALL results of your pilot study
- Discuss the potential results and implications of your pilot study findings

Final Research Proposal (20%)

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 <u>extension</u> of all content included in previous assignments.

SPECIAL NOTE: Because the data we collect for our pilot study is for educational purposes only (i.e. we share our results as part of our process to understand research), we do not complete the Human Subject's Review Board application. Therefore, the data we collect in this course may not be presented in any context other than this course. However, if you wish to use these data for a conference presentation or as the foundation for a research process, please let me know and I will be happy to work with you to obtain approval from Mason's HSRB.

• Grading Policies:

Unless otherwise notes, assignments must be printed and will be due at the beginning of class on the specific due date. All written papers are to be submitted in WORD (.doc or .docx). **Papers received after the**

beginning of class will be considered late and receive a 20% deduction in points per 24-hour period. If

you encounter extreme emergencies or are participating in a pre-approved university-sponsored function, exceptions may be made; however, these must be discussed with me to determine if they fall in this category. I strongly encourage you to make a back-up copy of any work submitted since computers have been known to crash at the most inopportune times.

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	

Professional Dispositions

See <u>https://cehd.gmu.edu/students/polices-procedures/</u> Students are expected to exhibit professional behaviors and dispositions at all times.

Course Schedule

WEEK	TOPIC	READINGS/ASSIGNMENTS
Week 1	Introduction to PRLS 450, Research, &	Intro to Research
8/28	Research Topics	Step 1: Decide on a Topic
	Developing Research Topics	
Week 2	Research Plan	Journal Article Review DUE
9/4	Hypotheses & Variables (Bring RQs to class)	RQ Worksheet Due
Week 3	Using our resources to conduct effective	Step 2: Review the Literature
9/11	literature reviews	Step 3: Identify Theoretical Underpinnings
	Pulling together literature for your review	Step 4: Develop a Scope of Study
		RQ Final Worksheet Due (In Class)
Week 4 9/18	Literature Review Work Continued	Come in with 5 Articles – needed for class
Week 5	Sampling	Step 6: Select a sample
9/25		Intro/Literature Review DUE
Week 6	Sampling Plan In-Class Work	Step 7: Choose a Design
10/2	Ethics	Step 8: Consider Measurement
		Step 9: Specify Data-Collection Tools
Week 7	Instrument & Measurement	Sampling Plan DUE
10/9	Qualitative Research	
Week 8	Reliability & Validity	Step 10: Address Ethical Responsibilities
10/16	Internal Validity	Step 12: Conduct a pilot test
		Step 14B: Analyze qualitative data
		Bring DRAFT Survey to Class
Week 9	Pilot Study	Methods Paper DUE
10/23	Intro to SPSS	*COMPUTER LAB – Innovation Hall 203
	SPSS – setting up your survey	
Week 10	Statistics – Descriptive	Entering Survey Results and Interpreting What
10/30	Descriptive Class Example	They Mean
		*COMPUTER LAB – Innovation Hall 203
Week 11	Statistics- Inferential	-Draw names for presentation dates

11/6	Inferential Class Example	*COMPUTER LAB – Innovation Hall 203
	Data Analysis and Interpreting Results	
Week 12	Work on Analysis Plan in class	REQUIRED – Bring Everything to Class –
11/13		Survey Handed out and Completed - finalize
		all stats in class.
		*COMPUTER LAB – Innovation Hall 203
Week 13	Final Paper discussion	Step 15: Present Results Using Visual Aids
11/20	Presenting your results	Step 16: Deliver an Oral Report
	Sample presentations	Analysis Plan DUE
Week 14	Presentations	Presentations
12/4		
Exam Day	Final Research Proposal DUE	Hand in hard copy of research proposal
12/11		

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 collaborations, ethical leadership, innovation, researchbased 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: <u>https://catalog.gmu.edu/policies/honor-code-system/</u>.
- 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 <u>tk20help@gmu.edu</u> or <u>https://cehd.gmu.edu/api/tk20</u>. Questions or concerns regarding use of Blackboard should be directed to <u>http://coursessupport.gmu.edu/</u>.
- For information on student support resources on campus, see <u>https://ctfe.gmu.edu/teaching/student-support-resources-on-campus</u>

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

George Mason University School of Recreation, Health, and Tourism SRST 450 Sec 002 - Research Methods Fall 2019 Final Proposal Performance Based Assessment

Final Proposal (100 points)

The intent of this assignment is for you to apply your conceptual and practical understanding of health, fitness and recreation resources to prepare a final and complete research proposal. The development of such a proposal will illustrate your familiarity with problem formation and hypothesis development, review and critical analysis of the scholarly literature in health, fitness and recreation resources, justification of appropriate methodology, and consideration of the implications of such research. This assignment is, in essence, a revision and <u>extension</u> of all content included in previous assignments. <u>It should include</u>:

PRELIMINARY PAGES (All in APA Format)

Title Page Table of Contents List of Tables and Figures Abstract (A short summary of your overall project & findings) *Look at your journal articles for examples

MAIN BODY OF THE PROPOSAL

Introduction/Literature Review Introduction - background and significance Literature Review (themed and with appropriate sources) **Research Questions** Hypotheses - Direct and Null Independent and Dependent Variables Definitions Sampling Populations (Target and accessible population descriptions) Sample size Sampling procedure Sampling bias Methods Survey Description Reliability, Validity and Internal Validity Procedures for Data Collection and Triangulation Ethics Analysis **Pilot Study Results** Descriptive statistics (Graphs and tables) Inferential statistics (Graphs and tables) Discussion and Conclusions (recommendations, and implications for theory, research and practice, what it all means) Reference List (at least 10 scholarly journals and ALL SOURCES USED)

APPENDICES

Cover Letter

Blank Questionnaire

Guidelines:

- This assignment should be clearly typewritten in paragraph format.
- Use subheadings appropriate to your final proposal and to ensure that you have responded to all requirements.
- APA format
- Make a copy (for yourself) of the assignment submitted.

Grading:

- Grading will be based on completeness of responses, clarity and accuracy of written presentation.
- Exclusive of the reference list, the final research proposal must be not less than 3,500 words in length.
- Responses should demonstrate independent thought and attention to detail (e.g., grammar and spelling).

Again, this is a writing intensive course; as such, you should be using feedback from previous assignments to improve your writing skills.

ASSIGNMENT DUE: **Hard copy submitted** <u>Wednesday December 11, 2019 @ 4:30 p.m.</u> Papers received AFTER 4:30 p.m. will be considered late and will receive a 20% reduction in points per 24-hour period after noon (Saturdays & Sundays are included).

Item	0 Points	1-2 Points	3-4 Points	5 Points
	Student made no changes to original section based on feedback and suggestions from draft review.	Student made some changes to original section based on feedback and suggestions from draft review but further changes were required.	Student made extensive changes to original section based on feedback and suggestions from draft review.	Student made all changes to original section based on feedback and suggestions from draft review and/or no changes were required.
Preliminary Pages				
Introduction				
Integrated Review of the Literature				
Synthesis of Literature				
Rationale for the Study				
Problem Statement				
Research Questions				
Variables and Definitions				
Hypotheses				
Populations and Sample Size				
Sampling Procedure and Bias				
Instrumentation Reliability/Validity				
Procedures for Data Collection/Triangulation				
Data Analysis/Pilot Study Results				
Conclusion/Discussion				
References (at least 10)				
Survey				
Cover Letter				

Overall Flow		
Language Control		