George Mason University
College of Education and Human Development
School of Sport, Recreation, and Tourism Management

SRST 450 – DL2 – Research Methods
3 Credits – Spring 2021
Wednesdays 4:30 – 7:10pm – Blackboard Online Classroom

Faculty

Instructor:	Ivan Levin, M.S.
Office:	213 Krug Hall (School of Sport, Recreation, and Tourism Management)
Office Hours:	By Appointment
Email:	ilevin@gmu.edu
Phone Number:	540-818-5818 (9am-10pm Call or Text)

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. Offered by School of Sport/Rec/Tour Mgmt. Limited to three attempts.

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 the online distance education approach. The online portion of the course will be delivered via Blackboard learning management system (LMS) housed in the MyMason portal (http://mymason.gmu.edu). The course will use primarily an asynchronous format with minimal synchronous instruction. Students will log in to the Blackboard course site using their Mason email name (everything before "@masonlive.gmu.edu) and email password.

Under no circumstances, may 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 a standard up-to-date browser, either Internet Explorer or Mozilla Firefox is required (note: Opera and Safari are not compatible with Blackboard).
- 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/getwindows-media-player
  - Apple Quick Time Player: www.apple.com/quicktime/download/
- Activities and assignments in this course will regularly use web-conferencing software (Blackboard Collaborate/Zoom). In addition to the requirements above, students are required to have a device with a functional camera and microphone. In an emergency, students can connect through a telephone call, but video connection is the expected norm.
- The use of laptop computers is required in this class. You will only be permitted to work on material related to the class, however. Engaging in activities not related to the course (e.g., gaming, email, chat, etc.) will result in a significant deduction in your participation grade.
- We will frequently be using the internet as a means to enhance our discussions. We will also be using computers for our in-class writing assignments. Please be respectful of your peers and your instructor and do not engage in activities that are unrelated to the class. Such disruptions show a lack of professionalism and may affect your participation grade.
- Most of our synchronous meetings in this class will be recorded to provide necessary information for students in this class. Recordings will be stored on Blackboard [or other secure site] and will only be accessible to students taking this course during this semester.

Learner 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.

Learner 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 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 Sport, Recreation, and Tourism Management (SRTM);
- Make reasoned, well-organized arguments with introductions, thesis statements, supporting evidence, and conclusions appropriate to SRTM;
- 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 SRTM; 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 Association Standards
Further, upon completion of this course, students will meet the following professional accreditation standards for 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 Texts
Riddick, C.C., & Russell, R.V. (2015). *Research in recreation, parks, sport, and tourism* (3rd ed.). Champaign, IL: Sagamore Publishing.

Covid-19—Safe Return to Campus Statement
Students must be fully familiar with the document, "Safe Return to Camus and Remote Learning Guidance for Students Enrolled in CEHD Courses," which is posted as an addendum under the "Syllabus" tab of the course Blackboard site. All students taking courses with a face-to-face component are required to take Safe Return to Campus Training prior to visiting campus. Training is available in *Blackboard*. Students are required to follow the university's public health and safety precautions and procedures outlined on the university *Safe Return to Campus webpage*. Similarly, all students in face to face and hybrid courses must also complete the Mason COVID Health Check daily, seven days a week. The COVID Health Check system uses a color code system and students will receive either a Green, Yellow, or Red email response. Only students who receive a "green" notification are permitted to

attend courses with a face-to-face component. If you suspect that you are sick or have been directed to self-isolate, please quarantine or get testing. Faculty are allowed to ask you to show them that you have received a Green email and are thereby permitted to be in class.

- Complete your daily Mason COVID Health Check online health survey before coming to campus or leaving their residence hall;
- Quarantine at home if their health survey produces a yellow or red condition;
- Be prepared to show their daily green health status upon entering any classroom; and
- Practice all enhanced hygiene practices, including wearing a face covering that covers the nose and mouth, washing hands, maintaining at least six feet of physical distance, and staying away from campus and getting tested if they feel any symptoms consistent with COVID-19.

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

Assignments and Evaluations

Introduction, Problem Statement, Lit Review, Hypothesis, Variables	15%
Sampling Plan	10%
Research Design, Measurement and Data Collection	15%
Analysis Plan	15%
Research Presentation	10%
Final Research Proposal (This is a Performance Based Assessment)	25%
Class Participation (Article Review & Research Classification, attendance, etc.)	10%
TOTAL	**100%**

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

Assignment Summaries

Article Review & Research Classification
The intent of this assignment is to increase your familiarity with evidence-based peer-reviewed journal articles. Select **one** of the articles posted on http://courses.gmu.edu in our "Assignments" folder. 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:

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 peer-reviewed research articles – do not confuse these with articles from newspapers which are NOT empirical nor peer-reviewed);
d. **TWO** 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

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. 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, 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

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 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, **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.
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 <u>to your theoretical participants</u> 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

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 electronically to 30 people [similar to those you hope to study] and input the data in SPSS.

II. Using SPSS, 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. Using SPSS, 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

The intent of this assignment is for you to share your research proposal with your colleagues via a 15-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. This presentation will happen at the end of the semester via ZOOM or Google Hangout.

- 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 (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

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.

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

Unless otherwise noted, assignments must be emailed and will be due at the beginning of class on the specific due date**.** All electronic 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 https://cehd.gmu.edu/students/polices-procedures/

Class Schedule

WEEK	In-Class/ Online	TOPIC	READINGS/ASSIGNMENTS
Week 1 1/27	Online	Introduction to PRLS 450, Research, & Research Topics Developing Research Topics	Intro to Research Step 1: Decide on a Topic
Week 2 2/03	Online	Research Plan Hypotheses & Variables (Bring RQs to class)	**Journal Article Review DUE** **RQ Worksheet Due**
Week 3 2/10	Online	Using our resources to conduct effective literature reviews Pulling together literature for your review	Step 2: Review the Literature Step 3: Identify Theoretical Underpinnings Step 4: Develop a Scope of Study **RQ Final Worksheet Due (In Class)**
Week 4 2/17	Online	Literature Review Work Continued	
Week 5 2/24	Online	Sampling	Step 6: Select a sample **Intro/Literature Review DUE**
Week 6 3/03	Online	Work on Sampling Plan	
Week 7 3/10	Online	Instrument & Measurement Qualitative Research Ethics	Step 10: Address Ethical Responsibilities **Sampling Plan DUE**
Week 8 3/17	Online	Reliability & Validity Internal Validity	**Bring DRAFT Survey to Class** Step 7: Choose a Design Step 8: Consider Measurement Step 9: Specify Data-Collection Tools
Week 9 3/24	Online	Pilot Study Intro to SPSS SPSS – setting up your survey	Step 12: Conduct a pilot test Step 14B: Analyze qualitative data **Methods Paper DUE** ***ONLINE COMPUTER LAB**
Week 10 3/31	Online	Statistics – Descriptive Descriptive Class Example	***ONLINE COMPUTER LAB**
Week 11 4/07	Online	Statistics- Inferential Inferential Class Example	***ONLINE COMPUTER LAB**
Week 12 4/14	Online	Data Analysis and Interpreting Results -Entering Survey Results and Interpreting What They Mean Work on Analysis Plan in class	REQUIRED – Bring Everything to Class – Step 15: Present Results Using Visual Aids Step 16: Deliver an Oral Report ***ONLINE COMPUTER LAB**
Week 13 4/21	Online	Final Paper discussion Presenting your results Sample Presentations	**Analysis Plan DUE**
Week 14 4/28	Online	Presentations	**Presentations**
Exam Day 5/05	Online	Presentations	**Presentations** **Final Research Proposal DUE** **Email Electronic copy by 4:30pm**

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

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/ .

George Mason University
School of Sport, Recreation, and Tourism Management
SRST 450 Sec DL2 - Research Methods
Spring 2021
Final Proposal Performance Based Assessment

Final Proposal (200 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 **extension** of all content included in previous assignments. **It should include**:

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: **Paper copy must be submitted by <u>Tuesday, May 4, 2021 by 4:30 p.m.</u>** Papers received AFTER 7:00 p.m. will be considered late and will receive a 20% reduction in points per 24-hour period after noon (Saturdays & Sundays are included).

Final Research Proposal Assessment Rubric:

Item	Needs Extensive Work	Satisfactory and Could be Improved	Excellent
Introduction **Background for the Study and Overview of the Study (20 points)**	**0-10 points** The author did not provide or provided very limited general and/or cited evidence to inform the reader about the key issues involved in the proposed study.	**11-15 points** The author provided some general and/or cited evidence to inform the reader about the key issues involved in the proposed study but needs to expand on the key issues presented.	**16-20 points** The author provided significant general and/or cited evidence to inform the reader about the key issues involved in the proposed study.
Integrated Review of the Literature (40 points)	**0-20 points** Journal article summaries were listed rather than integrated as a cohesive discussion and/or less than ten peer-reviewed empirical studies were used in the review of literature. Conceptual models and/or pertinent theoretical frameworks were not presented.	**21-30 points** The review of the articles was adequately integrated between articles. Key findings from at least ten peer-reviewed empirical studies were adequately organized and presented, but could be improved. Conceptual models and/or theoretical frameworks were presented but could be improved.	**31-40 points** The review of the articles was well integrated between articles. Key findings from at least ten peer-reviewed empirical studies were well organized, presented, and discussed relative to each other and the author's proposed study. Conceptual models and/or theoretical frameworks were presented accurately and clearly.
Synthesis of the Literature (5 points)	**0-2 points** Conclusions drawn about the convergent and divergent views illuminated throughout the literature review were not presented or were presented in a minimal and/or non-cohesive manner.	**3-4 points** Conclusions drawn about the convergent and divergent views illuminated throughout the literature review were discussed but were not presented in a cohesive manner.	**5 points** Conclusions drawn about the convergent and divergent views illuminated throughout the literature review were discussed and presented in a cohesive and manner.
Rationale for the Study (5 points)	**0-2 points** The author did not provide or provided very limited cited evidence of the importance and significance of the study.	**3-4 points** The author provided some cited evidence of the importance and significance of the study but could be improved.	**5 points** The author provided & cited evidence for the importance of conducting the proposed study.
Problem Statement (5 points)	**0-2 points** The problem statement is difficult to identify or not stated.	**3-4 points** The problem statement is adequately stated and supported by the background and overview sections but could be improved.	**5 points** The problem statement is clearly stated and supported by the background and overview sections.
Research Questions (5 points)	**0-2 points** Research questions were difficult to understand or were not presented.	**3-4 points** Research questions were included but were not directly related to the previous sections presented.	**5 points** Research questions were well articulated and were directly related to the previous sections presented.
Variables and Definitions (5 points)	**0-2 points** Independent and dependent variables were not accurately defined, nor clearly described.	**3-4 points** Independent and dependent variables were accurately identified, but not clearly described.	**5 points** Independent and dependent variables were accurately identified and clearly described for the reader.
Hypotheses (5 points)	**0-2 points** Two hypotheses were incorrectly stated (not testable) or not provided.	**3-4 points** Two hypotheses were stated, but need to be refined in order to be easily testable.	**5 points** Two hypotheses were correctly stated and testable, and variables clearly identifiable.

Population **(10 points)**	**0-3 points** 0 or 1 demographic characteristics were used to describe the population from which the student is drawing the sample. The demographic characteristics chosen are not appropriate to the study.	**4-7 points** Two (2) demographic characteristics were used to describe the population from which the student is drawing the sample. The demographic characteristics chosen are appropriate to the study.	**8-10 points** At least 3 demographic characteristics were used to describe the population from which the student is drawing the sample. The demographic characteristics chosen are appropriate to the study.
Determination of Sample Size **(5 points)**	**0-2 points** 2 or more of the following categories of information are not provided or are not correctly explained: The population size is clearly identified (or projected with evidence for the projection). The appropriate sample size is identified, and literature is cited as justification. The expected response rate is projected, and literature is cited as justification.	**3-4 points** 1 of the following categories of information is not provided or is not correctly explained: The population size is clearly identified (or projected with evidence for the projection). The appropriate sample size is identified, and literature is cited as justification. The expected response rate is projected, and literature is cited as justification.	**5 points** The population size is clearly identified (or projected with evidence for the projection). The appropriate sample size is identified, and literature is cited as justification. The expected response rate is projected, and literature is cited as justification.

Sampling Procedure **(10 points)**	**0-3 points** 2 or more of the following categories of information is not provided or is notcorrectly explained: The specific COMBINATION of sampling techniques is explained. The choices of sampling technique are justified. IF the student chooses to sample for a specific characteristic(s), the characteristic(s) is clearly explained.	**4-7 points** 1 of the following categories of information is notprovided or is not correctly explained: The specific COMBINATION of sampling techniques is explained. The choices of sampling technique are justified. IF the student chooses to sample for a specific characteristic(s), the characteristic(s) is clearly explained.	**8-10 points** The specific COMBINATION of sampling techniques is explained, and the choices justified. IF the student chooses to sample for a specific characteristic(s), the characteristic(s) is clearly explained.
Sampling Bias **(5 points)**	**0-2 points** 0 or 1 possible sources of sampling bias are clearly identified, and/or the effects of the potential sampling biases are clearly explained.	**3-4 points** Two (2) possible sources of sampling bias are clearly identified, and/or the effects of the potential sampling biases are not clearly explained.	**5 points** Three (3) or more possible sources of sampling bias are clearly identified. The effects of the potential sampling biases are clearly explained.
Research Design and Instrumentation (including a discussion on the validity and reliability of the instrument and potential threats to internal and external validity of the study) **(30 points)**	**0-15 points** ***Research Design* –** Author clearly described less than 2 of the following: • The research design • Rational for research design • Threats and how s/he will minimize threats to internal and external validity ***Instrumentation* –** Author clearly described less than 2 of the following: • At least 1 strategy for assessing the validity of his/her questionnaire items for	**16-25 points** ***Research Design* –** Author clearly described 2 of the following: • The research design • Rational for research design • Threats and how s/he will minimize threats to internal and external validity ***Instrumentation* –** Author clearly described 2-3 of the following: • At least 1 strategy for assessing the validity of his/her questionnaire items for	**25-30 points** ***Research Design* –** Author clearly described the following: • The research design • Rational for research design • Threats and how s/he will minimize threats to internal and external validity ***Instrumentation* -**Author clearly described the following: • At least 1 strategy for assessing the validity of his/her questionnaire items

	measuring the proposed IVs and DVs • At least 1 strategy for assessing the reliability of his/her questionnaire • At least 1 strategy for assessing the validity of the responses to questionnaire items	measuring the proposed IVs and DVs • At least 1 strategy for assessing the reliability of his/her questionnaire • At least 1 strategy for assessing the validity of the responses to questionnaire items	for measuring the proposed IVs and DVs • At least 1 strategy for assessing the reliability of his/her questionnaire • At least 1 strategy for assessing the validity of the responses to questionnaire items

Procedures for Data Collection **(10 points)**	**0-3 points** Another researcher would have to ask the author to clarify 3 or more steps to collect data and come up with the projected sample.	**4-7 points** Another researcher would have to ask the author to clarify 1 or 2 steps to collect data and come up with the projected sample.	**8-10 points** Another researcher could easily and clearly follow the author's steps to collect data and come up with the projected sample.
Data Analysis: **(15 points)**	**0-5 points** Proposed tests described by author were not appropriate or were missing. Author did not provide descriptions of any additional tests designed to illustrate additional information for stakeholders.	**6-10 points** Author described proposed tests somewhat accurately. Author provided at least one additional proposed test designed to illustrate additional information for stakeholders.	**11-15 points** Author accurately described proposed tests. Author provided at least two additional proposed tests designed to illustrate additional information for stakeholders.
References **(10 Points)**	**0-3 points** Author cited fewer than 5 referred articles and less than 5 additional articles.	**4-7 points** Author accurately cited at least 4 refereed articles but less than the 5 required and only 4 or fewer additional articles.	**8-10 points** Author accurately cited 10 ***or more refereed articles.***
Appendix A: Final Instrument or Interview Protocol **(10 points)** Proper formatting, questions follow rules, directions, thank-you	**0-3 points** Questionnaire or protocol is breaking 3 or more rules for design.	**4-7 points** Questionnaire or protocol is breaking 1-2 rules for design.	**8-10 points** Questionnaire or protocol follows all rules for design.
Appendix B: Cover Letter (5 points) Letterhead, date, name/address, greeting, signature, title, study summary, why useful, why important to respondent, confidentiality info, how info to be used.	**0-2 points** Author is missing 3 or more key elements of the cover letter and/or wrote the letter in a way that will likely influence potential responses.	**3-4 points** Author is missing 1-2 key elements of the cover letter and/or wrote the letter in a way that will likely influence potential responses.	**5 points** Author provided all items noted and wrote letter in an engaging manner without overly influencing potential responses.