# GEORGE MASON UNIVERSITY College of Education and Human Development School of Recreation, Health, and Tourism

SRST 450 – Research Methods 3 Credits - Fall 2017

# **Faculty**

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# Prerequisites/Corequisites:

60 credits and <u>STAT 250<sup>C</sup></u>, DESC 210<sup>C</sup>, <u>OM 210<sup>C</sup></u> or IT 250<sup>C</sup>. 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: Writing Intensive in the Major

#### **Course Overview**

This course is a designated "Writing-Intensive" (WI) course – fulfilling in part the WI requirement for all HFRR majors – therefore, each person 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 you'll complete throughout the semester. These will be thoroughly critiqued and graded and will form the basis for your final Research Proposal. I'll do all I can to share knowledge, skills, and techniques for success, but it will be your responsibility to study and incorporate the comments on your papers, suggestions from your colleagues, and information from the text. We'll follow the guidelines of the Publication Manual of the American Psychological Association (APA) (6th ed.).

Unless otherwise noted, all written papers will be submitted electronically via email.

Assignments will be due at the beginning of class on the specified date due. All written papers are to be submitted using WORD (with a .doc or .docx file extension) - .pdf or other formats are not permitted in this course. Papers received AFTER 10:30 a.m. will be considered late and receive a 20% deduction in points per 24 hour period.

If you are confronted with extreme emergencies or are participating in a pre-approved university-sponsored function, exceptions may be made; however, this is only applicable if pre-approved with me (your instructor). In addition, 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.

### **Course Delivery Method**

This course will be delivered online (76% or more) using an asynchronous format via the Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available at all times from Monday, August 28<sup>th</sup>, 2017 through Saturday, December 9<sup>th</sup>, 2017.

Under no circumstances, may candidates/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. [Delete this sentence if not applicable.]
- 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: [Add or delete options, as desire.]
  - o Adobe Acrobat Reader: <a href="https://get.adobe.com/reader/">https://get.adobe.com/reader/</a>
  - Windows Media Player:
     <a href="https://windows.microsoft.com/en-us/windows/downloads/windows-media-player/">https://windows.microsoft.com/en-us/windows/downloads/windows-media-player/</a>
  - o Apple Quick Time Player: <a href="www.apple.com/quicktime/download/">www.apple.com/quicktime/download/</a>

### **Expectations**

- <u>Course Week</u>: Because asynchronous courses do not have a "fixed" meeting day, our week will start on Mondays, and finish on Fridays. All assignments will be due by 5:00pm on Fridays.
- <u>Log-in Frequency</u>: Students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be 3 times per week.
- <u>Participation</u>: Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- <u>Technical Competence</u>: Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course.
- <u>Technical Issues</u>: Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload: Expect to log in to this course at least 3 times a week to read announcements, participate in the discussions, and work on course materials. Remember, this course is not self-paced. There are specific deadlines and due dates listed in the CLASS SCHEDULE section of this syllabus to which you are expected to adhere. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- <u>Instructor Support</u>: Students may schedule an appointment to discuss course requirements, content or other course-related issues. These discussion(s) will take place via telephone or web conference. Students should email the instructor to suggest preferred times/dates.
- <u>Netiquette</u>: The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- <u>Accommodations</u>: Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

### **Learner Outcomes or Objectives**

This course is designed to enable students to do the following:

- 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 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. and Russell, R. V. (2015). Research in Recreation, Parks, Sport, and Tourism (3nd Edition). Champaign, IL: Sagamore Publishing.

#### **Course Performance Evaluation**

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

- Assignments and Examinations
- <u>CITI Training and Certification</u>: Students are required to complete the basic Human Subjects Research training hosted online by the Collaborative Institutional Training Initiative Instructions Provided. 25 points possible
- <u>Proposal Part # 1</u> Yellow Elements on Assignment Rubric: Students are required to complete the introduction to their draft research proposal including both a background for the study and overview of the study Guidelines Provided. 30
- <u>Proposal Part # 2</u> Green Elements on Assignment Rubric: Students are required to complete an integrated review of the literature highlighting theoretical frameworks, conceptual models and core themes associated with their topic of choice. A synthesis of the literature highlighting the key elements presented in the integrated review of literature is also required Guidelines Provided.
- <u>Proposal Part # 3</u> Pink Elements on Assignment Rubric: Students are required to complete a rationale for the study, statement of the problem, research questions, a clear description of variables to be included in the study and at least two testable hypotheses if study is quantitative or mixed methods Guidelines Provided. 45
- <u>Proposal Part # 4</u> Blue Elements on Assignment Rubric: Students are required to complete the population and sampling portion of their proposal Guidelines Provided.
- <u>Proposal Part # 5</u> Orange Elements on Assignment Rubric: Students are required to describe their research design and instrumentation, research setting, procedures for data collection and analysis, list all references in APA format used throughout the draft proposal as well as appendices as needed Guidelines Provided. 95
- <u>Final Proposal</u> Students are expected to use feedback from all previous assignments to complete the final proposal. The final proposal includes all areas of the semester long assignment submitted for final review. 100
- Total 400

#### Grading

This course will be graded on a point system, with a total of 400 points possible

A	= 376-400	В	= 336-351	C	= 296-311	F	= 0-239
A-	= 360-375	B-	= 320-335	C-	= 280-295		
B+	= 352-359	C+	= 312-319	D	= 240-279		

# **Professional Dispositions**

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

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

### **Core Values Commitment**

The College of Education and Human Development is committed to collaborations, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <a href="http://cehd.gmu.edu/values/">http://cehd.gmu.edu/values/</a>.

#### **GMU Policies and Resources for Students**

#### **Policies**

- Students must adhere to the guidelines of the Mason Honor Code (see <a href="http://oai.gmu.edu/the-mason-honor-code/">http://oai.gmu.edu/the-mason-honor-code/</a>).
- Students must follow the university policy for Responsible Use of Computing (see <a href="http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/">http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</a>).
- 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 (seehttp://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 <a href="mailto:tk20help@gmu.edu">tk20help@gmu.edu</a> or <a href="https://cehd.gmu.edu/aero/tk20">https://cehd.gmu.edu/aero/tk20</a>. Questions or concerns regarding use of Blackboard should be directed to <a href="http://coursessupport.gmu.edu/">https://coursessupport.gmu.edu/</a>.
- For information on student support resources on campus, see <a href="https://ctfe.gmu.edu/teaching/student-support-resources-on-campus">https://ctfe.gmu.edu/teaching/student-support-resources-on-campus</a>

For additional information on the College of Education and Human Development, please visit our website <a href="https://cehd.gmu.edu/">https://cehd.gmu.edu/</a>.

# **Tentative Class Schedule:**

	DATE		Торіс	READINGS/ASSIGNMENT DUE
	Aug	28	<ul> <li>Introduction to SRST 450</li> <li>Research and Research Topics</li> <li>Developing Research Topics</li> </ul>	Step 1: Decide on a Topic Step 2: Review the Literature
	Sept.	4	<ul> <li>Using our Resources to conduct effective literature reviews</li> <li>Pulling together literature for your review</li> </ul>	Step 3 : Identify Theoretical Underpinnings  Yellow Rubric Items Due
	Sept.	11	<ul> <li>Research Plan and Ethics</li> <li>Independent Writing Days – Completing the Literature Review. Take this week to complete this assignment throughout the week. You should expect to write approximately 3-4 pages daily.</li> </ul>	Step 10 : Address Ethical Responsibilities — Complete CITI Training CITI Certification Due
	Sept.	18	Developing Effective Research Questions	Green Rubric Items Due Step 4: Develop a Scope of Study
	Sept.	25	Purpose Statement and Rationale for the Study	<b>Step 5 :</b> Explain Significance of Study
	Oct.	2	Hypotheses and Variables	Pink Rubric Items Due
	Oct.	9	<ul><li>Population and Sampling</li><li>Quantitative, Qualitative, and Mixed Designs</li></ul>	Step 6 : Select a Sample Step 7 : Choose a Design
	Oct.	16	Reliability and Validity	Step 8: Consider Measurement
	Oct.	23	<ul> <li>Instrumentation and Measurement</li> <li>Surveys and Interview Protocols</li> <li>Data Collection</li> </ul>	Introduction to Step 9: Specify Data Collection Methods
	Oct.	30	<ul> <li>Descriptive and Interview Protocols</li> <li>Data Collection</li> </ul>	Step 9 continued : Specify Data Collection Methods Blue Rubric Items Due
	Nov.	6	Descriptive and Inferential Statistics – Part I	Step 14A: Analyze Quantitative Data
	Nov.	13	Descriptive and Inferential Statistics – Part II	Step 14B: Analyze Qualitative Data
	Nov.	20	Thematic Coding – Trends and Themes	Step 15 : Create Visual Aids
	Nov.	27	Writing and Reporting Results	Step 16: Write Report Step 17: Deliver a Presentation Orange Rubric Items Due
Mon	Dec.	4	Independent Writing Days	
Mon	Dec.	11	Final Proposal Due	

Note: Faculty reserves the right to alter the schedule as necessary

#### **Assessment Rubric**

#### Final Proposal Draft (275 points)

The intent of this assignment is to apply your conceptual, and practical understanding of your profession to asking questions and defining research problems. This assignment will help you develop an awareness of the research potential in your field of interest and will serve as a beginning for your final project or thesis that you will complete during future independent studies.

This proposal draft will include:

- 1. A **background for the study** section about the specific topic to be investigated (including the significance of the problem/issue to be investigated).
- 2. An **overview of the study** section including a specific purpose statement for the study.
- 3. An integrated **review** of pertinent **literature** (*at least 10 current*, evidence-based/empirical and peer- reviewed research articles do not confuse these with articles from newspapers which are NOT empirical nor peer-reviewed) (**literature review section**).
- 4. A **synthesis of literature** section highlighting key points and themes illustrated throughout the review of the literature section.
- 5. A rationale for the study, which clearly articulates reasons why you believe the study should be conducted.
- 6. A clear and concise **statement of the problem** (and/or issue) that ties to the rationale for the study.
- 7. **Research Questions** (usually 3 or 4 in total).
- 8. **Variables and Definitions** (Independent and dependent variables should be accurately identified and clearly described for the reader).
- 9. TWO testable **hypotheses** (if quantitative study) regarding the outcome of your study.
- 10. A complete definition of the target and accessible **population** from which the sample would be drawn. This definition should **thoroughly describe** the **size** of this population and **relevant characteristics** (e.g., age, ability, socioeconomic status, etc.). This is based on your PROPOSED study.
- 11. 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 sources!
- 12. An explanation of the **sampling** 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. Please also identify any possible sources of sampling bias.
- 13. 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 and external validity** (e.g., subject characteristics, location, instrumentation, maturation, subject attitude, implementation, generalizability to a larger audience) and how you have designed the study to minimize the potential effects of these threats.
- 14. Briefly explain the sources for questions to be used in the survey (quantitative) or interview protocol (qualitative) 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
- 15. 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.
- 16. Describe the **setting** in which the research will take place using all descriptive characteristics that are applicable.

- 17. 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.
- 18. Develop a **data analysis strategy.** For a quantitative study, a discussion of descriptive and inferential statistics is appropriate. For a qualitative study, a discussion of coding techniques and application towards previously discussed theory is appropriate. If mixed methods, both will be required.
- 19. Develop an appropriate cover letter written to your theoretical participants that will reference the collection procedures you have determined. This letter must include, but is not limited to the following:
  - 1. Letterhead, date, name and address, greeting, signature and title;
  - 2. What the study is about and why it is useful;
  - 3. Why the recipient is important and why they should participate;
  - 4. A promise of confidentiality or anonymity and an explanation of a numbering system if used; and,
  - 5. Assurance that the information will be used, incentives that will be given, if appropriate, and a thank you.
- 20. Develop a survey instrument or data collection form. It should be formatted in-line with the data collection method selected (in other words, an interview form should have appropriate guide questions, arrows, transitions). The form <u>must include</u>, but is not limited to:
  - 1. Introductory information,
  - 2. Directions,
  - 3. Thank you,
  - 4. Room for comments,
  - 5. Question variety, and
  - 6. Proper formatting of questions. *Be creative BUT above all, rigorous and methodical.*

[NOTE: The cover letter and instrument/protocol will each be attached in an appendix to your proposal. In the written text, you will need to refer to the appropriate Appendix (e.g., Appendix A and Appendix B].

#### **Guidelines:**

- All work in this course should be written in the third person using complete sentences.
- Use subheadings appropriate to the assignment (e.g., Introduction, Literature Review, Statement of the Problem, References, etc...) to serve as a guide for "piecing together" your final proposal and to help you be sure you have responded to all requirements of the assignment.
- At least ten of your references must be research articles appearing in refereed journals. Additional references providing support for significance and definitions may come from other literature sources.
- Appropriately cite all sources following the current APA guidelines.
- Create an **APA-style cover page** with running headers throughout the document.
- Create an APA-style references/works cited page.

#### **Grading:**

- Overall, grading will be based on completeness of responses, clarity and accuracy of written presentation. See rubric for details.
- Proposal drafts should be developed through the integration of material from your courses, readings and practical experiences, and should demonstrate independent thought and attention to detail (e.g., grammar and spelling).

Papers received AFTER that will be considered late and will receive a 20% reduction in points per 24-hour period after noon (Saturdays & Sundays are included).

**Satisfactory and Could be** 

Excellent

**Needs Extensive Work** 

Item

100m	Treeds Extensive Work	Improved	Excelent
Introduction	0-19 points	20-27 points	28-30 points
	The author did not provide or	The author provided some	The author provided
Background for the Study	provided very limited general	general and/or cited evidence to	significant general and/or
and Overview of the Study	and/or cited evidence to inform	inform the reader about the key	cited evidence to inform the
(30 points)	the reader about the key issues	issues involved in the proposed	reader about the key issues
(	involved in the proposed study.	study but needs to expand on the	involved in the proposed
		key issues presented.	study.
Integrated Review of the	0-40 points	41-49 points	50-55 points
Literature	Journal article summaries were	The review of the articles was	The review of the articles
(55 points)	listed rather than integrated as	adequately integrated between	was well integrated between
( <b>r</b> )	a cohesive discussion and/or	articles. Key findings from at	articles. Key findings from at
	less than ten peer-reviewed	least ten peer-reviewed empirical	least ten peer-reviewed
	empirical studies were used in	studies were adequately	empirical studies were well
	the review of literature.	organized and presented, but	organized, presented, and
	Conceptual models and/or	could be improved.	discussed relative to each
	pertinent theoretical	Conceptual models and/or	other and the author's
	frameworks were not	theoretical frameworks were	proposed study. Conceptual
	presented.	presented but could be	models and/or theoretical
		improved.	frameworks were presented
		•	accurately and clearly.
Synthesis of the Literature	0-3 points	4-7 points	8-10 points
(10 points)	Conclusions drawn about the	Conclusions drawn about the	Conclusions drawn about the
( · r · · · · )	convergent and divergent	convergent and divergent views	convergent and divergent
	views illuminated throughout	illuminated throughout the	views illuminated throughout
	the literature review were not	literature review were discussed	the literature review were
	presented or were presented in	but were not presented in a	discussed and presented in a
	a minimal and/or non-cohesive	cohesive manner.	cohesive and manner.
	manner.		
Rationale for the Study	0-3 points	4-7 points	8-10 points
(10 points)	The author did not provide or	The author provided some cited	The author provided & cited
	provided very limited cited	evidence of the importance and	evidence for the importance
	evidence of the importance and	significance of the study but	of conducting the proposed
	evidence of the importance and	significance of the study but	or conducting the proposed
	significance of the study.	could be improved.	study.
Problem Statement			
Problem Statement (10 points)	significance of the study.	could be improved.	study.
	o-3 points The problem statement is difficult to identify or not	could be improved. 4-7 points	study. 8-10 points
	o-3 points The problem statement is	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview	study.  8-10 points  The problem statement is clearly stated and supported by the background and
	o-3 points The problem statement is difficult to identify or not	could be improved.  4-7 points  The problem statement is adequately stated and supported	study.  8-10 points  The problem statement is clearly stated and supported
(10 points)	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.	study.  8-10 points  The problem statement is clearly stated and supported by the background and overview sections.
(10 points)  Research Questions	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points	study.  8-10 points  The problem statement is clearly stated and supported by the background and overview sections.  8-10 points
(10 points)	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points  Research questions were	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points Research questions were	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well
(10 points)  Research Questions	o-3 points The problem statement is difficult to identify or not stated.  O-3 points Research questions were difficult to understand or were	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly
(10 points)  Research Questions	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points  Research questions were	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous
Research Questions (10 points)	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points  Research questions were difficult to understand or were not presented.	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.
Research Questions (10 points)  Variables and Definitions	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points  Research questions were difficult to understand or were not presented.  0-3 points	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points
Research Questions (10 points)	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points  Research questions were difficult to understand or were not presented.  0-3 points  Independent and dependent	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent
Research Questions (10 points)  Variables and Definitions	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points  Research questions were difficult to understand or were not presented.  0-3 points  Independent and dependent variables were not accurately	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately
Research Questions (10 points)  Variables and Definitions	significance of the study.  0-3 points  The problem statement is difficult to identify or not stated.  0-3 points  Research questions were difficult to understand or were not presented.  0-3 points  Independent and dependent	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately identified, but not clearly	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately identified and clearly
Research Questions (10 points)  Variables and Definitions (10 points)	o-3 points The problem statement is difficult to identify or not stated.  o-3 points Research questions were difficult to understand or were not presented.  o-3 points Independent and dependent variables were not accurately defined, nor clearly described.	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately identified, but not clearly described.	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately identified and clearly described for the reader.
Research Questions (10 points)  Variables and Definitions (10 points)  Hypotheses	o-3 points The problem statement is difficult to identify or not stated.  o-3 points Research questions were difficult to understand or were not presented.  o-3 points Independent and dependent variables were not accurately defined, nor clearly described.  o-1 points	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately identified, but not clearly described.  2-4 points	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately identified and clearly described for the reader.  5 points
Research Questions (10 points)  Variables and Definitions (10 points)	significance of the study.  0-3 points The problem statement is difficult to identify or not stated.  0-3 points Research questions were difficult to understand or were not presented.  0-3 points Independent and dependent variables were not accurately defined, nor clearly described.  0-1 points Two hypotheses were	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately identified, but not clearly described.  2-4 points  Two hypotheses were stated, but	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately identified and clearly described for the reader.  5 points Two hypotheses were
Research Questions (10 points)  Variables and Definitions (10 points)  Hypotheses	significance of the study.  0-3 points The problem statement is difficult to identify or not stated.  0-3 points Research questions were difficult to understand or were not presented.  0-3 points Independent and dependent variables were not accurately defined, nor clearly described.  0-1 points Two hypotheses were incorrectly stated (not testable)	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately identified, but not clearly described.  2-4 points  Two hypotheses were stated, but need to be refined in order to be	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately identified and clearly described for the reader.  5 points Two hypotheses were correctly stated and testable,
Research Questions (10 points)  Variables and Definitions (10 points)  Hypotheses	significance of the study.  0-3 points The problem statement is difficult to identify or not stated.  0-3 points Research questions were difficult to understand or were not presented.  0-3 points Independent and dependent variables were not accurately defined, nor clearly described.  0-1 points Two hypotheses were	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately identified, but not clearly described.  2-4 points  Two hypotheses were stated, but	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately identified and clearly described for the reader.  5 points Two hypotheses were correctly stated and testable, and variables clearly
Research Questions (10 points)  Variables and Definitions (10 points)  Hypotheses	significance of the study.  0-3 points The problem statement is difficult to identify or not stated.  0-3 points Research questions were difficult to understand or were not presented.  0-3 points Independent and dependent variables were not accurately defined, nor clearly described.  0-1 points Two hypotheses were incorrectly stated (not testable)	could be improved.  4-7 points  The problem statement is adequately stated and supported by the background and overview sections but could be improved.  4-7 points  Research questions were included but were not directly related to the previous sections presented.  4-7 points  Independent and dependent variables were accurately identified, but not clearly described.  2-4 points  Two hypotheses were stated, but need to be refined in order to be	study.  8-10 points The problem statement is clearly stated and supported by the background and overview sections.  8-10 points Research questions were well articulated and were directly related to the previous sections presented.  8-10 points Independent and dependent variables were accurately identified and clearly described for the reader.  5 points Two hypotheses were correctly stated and testable,

Determination of Sample Size (10 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.  0-3 points 2 or more of the following categories of information are	2-3 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.  4-7 points 1 of the following categories of information is not provided or is	At least 4 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 The population size is clearly identified (or projected with
	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.	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.	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.
		1.5	0.10
Sampling Procedure (10 points)	0-3 points 2 or more of the following categories of information is not provided or is <u>not</u> 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.	4-7 points  1 of the following categories of information is <u>not</u> provided 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 (10 points)	0-3 points 0 or 1 possible sources of sampling bias are clearly identified and/or the effects of the potential sampling biases are clearly explained.	4-7 points Only 2 possible sources of sampling bias are clearly identified and/or the effects of the potential sampling biases are not clearly explained.	8-10 points 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) (35 points)	0-14 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 measuring the proposed IVs and DVs  At least 1 strategy for assessing the reliability of his/her questionnaire	15-29 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 measuring the proposed IVs and DVs  At least 1 strategy for assessing the reliability of his/her questionnaire	30-35 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 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	At least 1 strategy for assessing the validity of the responses to questionnaire items	▲ At least 1 strategy for assessing the validity of the responses to questionnaire items
Research Setting (10 points)	<b>0-3 points</b> 0 or 1 characteristics were used	4-7 points 2-3 characteristics were used to	8-10 points At least 4 characteristics
	to describe the setting in which the student is conducting the study.	describe the setting in which the student is conducting the study.	were used to describe the setting in which the student is conducting the study.
Procedures for Data	0-3 points	4-7 points	8-10 points
Collection	Another researcher would have	Another researcher would have	Another researcher could
(10 points)	to ask the author to clarify 3 or more steps to collect data and come up with the projected sample.	to ask the author to clarify 1 or 2 steps to collect data and come up with the projected sample.	easily and clearly follow the author's steps to collect data and come up with the projected sample.
Data Analysis: (10 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.	4-7 points Author described proposed tests somewhat accurately. Author provided at least one additional proposed test designed to illustrate additional information for stakeholders.	8-10 points Author accurately described proposed tests. Author provided at least two additional proposed tests designed to illustrate additional information for stakeholders.
References	0-3 points	4-7 points	8-10 points
(10 Points)	Author cited 10 or fewer refereed articles.	Author accurately cited at least 11 refereed articles but less than the 20 required	Author accurately cited 20 or more refereed articles
Appendix A: Final	0-3 points	4-7 points	8-10 points
Instrument or Interview	Questionnaire or protocol is	Questionnaire or protocol is	Questionnaire or protocol
Protocol (10 points) Proper formatting, questions follow rules, directions, thank- you	breaking 3 or more rules for design.	breaking 1-2 rules for design.	follows all rules for design.
Appendix B: Cover Letter (10 points) Letterhead, date, name/address, greeting, signature, title, study summary, why useful, why important to respondent, confidentiality info, how info to be used.	0-3 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.	4-7 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.	8-10 points Author provided all items noted and wrote letter in an engaging manner without overly-influencing potential responses.

