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

SRST 623 001– Research Design and Statistical Reasoning
3 Credits, Fall 2020

Meeting times/place:	Online	W 4:30 pm -7:10 pm synchronous
	Face-2-Face	W 4:30 pm – 7:10 pm, Innovation Hall 222
		Oct 14, 21, and 28

Faculty

Name:	Dr. Chris Green
Office Hours:	virtually by appointment
Office Phone:	(703) 993-5371
Email Address:	bgreen21@gmu.edu

Prerequisites/Corequisites

Graduate standing

University Catalog Course Description

Introduces basic principles of scientific and scholarly inquiry in Sport and Recreation Studies. Explores the logic and practice of methods and techniques employed in research related to sport and recreation.

Course Overview

This course prepares students with the knowledge and skills needed to conduct basic or applied research within academia and in their current or future professions.

Course Delivery Method

This course will be delivered using a hybrid format. This course will be mainly delivered online (~80%) using a synchronous format via 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 on Monday, August 24th at 9 am.

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 standard up-to-date browsers. To get a list of Blackboard's supported browsers see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers
  To get a list of supported operation systems on different devices see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems

- 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 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: [Add or delete options, as desire.]
  - Adobe Acrobat Reader: https://get.adobe.com/reader/
  - Windows Media Player:
    https://support.microsoft.com/en-us/help/14209/get-windows-media-player
  - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- Course Week: Our course week will begin on Wednesday with our synchronous class meeting.
- Log-in Frequency:
  Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least [3] times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- Participation:
  Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:
  Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:
  Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

- Workload:
  Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:
  Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. You can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:
  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.
- Accommodations:
  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. Demonstrate appropriate use of research terminology and application of basic concepts and principles associated with scientific research;
2. Critically evaluate published research in scientific journals and the popular press;
3. Demonstrate the use of research methodologies and designs employed in SRST research;
4. Apply critical thinking and research findings in SRST practice;
5. Use descriptive and inferential statistics in analyzing research data; and
6. Prepare a sound and feasible research proposal.

Professional Standards Courses offered in the Sport and Recreation Studies (SRST) graduate program are guided by the principles of the Commission of Sport Management Accreditation (COSMA). COSMA (2010, p. 1) "bases its accrediting process on principles, rather than standards.")

The eight recommended principles are:
- outcomes assessment;
- strategic planning;
- curriculum;
- faculty;
- scholarly and professional activities;
- resources;
- internal and external relationships; and
- educational innovation.

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For more information, please see:

Commission of Sport Management Accreditation. (2010, June). *Accreditation principles and self study preparation*. Retrieved August 18, 2014 from http://cosmaweb.org/accredmanuals

Required Texts

*Bhattacherjee, A. (2012). Social science research: Principles, methods, and practices (2nd Ed.). *Textbooks Collection. 4.* Retrieved from: http://scholarcommons.usf.edu/oa_textbooks/3

*Brinkerhoff, C. (n.d.). *Doing research: A student's guide to finding and using the best sources.* Creative Commons Attribution 4.0 International License.

*Krause, S. D. (2007). *The process of research writing.* Retrieved from: http://www.stevendkrause.com/tprw/index.html

Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (6th ed.). Columbus, OH: McGraw-Hill Education. Also available online.
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*These texts are offered free via Creative Commons and can be downloaded from the course Blackboard site.

Additional readings, web exercises, and videos will be required throughout the semester and will be available on Blackboard (mymason.gmu.edu.).

Recommended Resources

American Psychological Association. (2020). *Publication Manual of the American Psychological Association* (7th ed.). Washington, DC: American Psychological Association.

Scribbr (n.d.). Home [YouTube Channel]. Retrieved from https://www.youtube.com/c/Scribbr-us/featured

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Via).

Assignments will be due at the time and date specified. No late work is accepted in this course.

You have three days after a graded assignment or exam has been returned to contact the professor to contest the grade. After three days, only the content of the graded assignment or exam can be discussed.

Assignments and/or Examinations

Assignment	Point Value
Proposal Part # 1a – Setting the stage: Students are required to present background information of the problem they will address justify, its importance, and provide a clear, concise, problem statement.	30
Proposal Part # 1b – Setting the stage: Students are required to present clearly specified aims and objectives for their research that clearly link to the background and problem statement specified in Part #1a.	20
Proposal Part # 1c – Setting the stage: Students are required to present an overarching research question linking to the problem statement, aims and objectives specified in Parts #1a and #1b. These should be further specified through the inclusion of either sub-questions or hypotheses.	20
Proposal Part # 2a – Mapping existing knowledge (Theoretical Frame): Students are required to select, justify, and explain a potential theoretical framework to guide their research.	20
Proposal Part # 2b – Mapping existing knowledge (Literature Map): Students are required to map the information needed/obtained via the literature, justify a potential framework to guide the research, and identify a source for each element of the map.	20
Proposal Part # 2c – Mapping existing knowledge (Annotated Bibliography): Students are required to submit an annotated bibliography of the sources identified for each element of the map (minimum = 8 peer-reviewed journal articles).	40
Proposal Part # 3a – Research Design: Students are required to describe and justify their research design.	20
Proposal Part # 3b – Research Design: Students are required to describe and justify the population and sample for their study and to describe the procedure they will use to obtain to recruit the desired sample.	20
Proposal Part # 3c – Research Design: Students are required to discuss the constructs and measures used in the study, and address issues of potential bias, validity and reliability.	20
Proposal Part # 3d – Research Design: Students are required to detail the procedures used to collect their data, and to submit the instrument that will be used to collect the data.	30
Proposal Part # 3e – Research Design: Students are required to describe the way in which they will analyze the data collected.	20
Proposal Part # 4 – Preliminary Results: Students are required to collect data from a small sample and conduct an initial analysis of that data. You will report the results of your preliminary analysis, including any visual presentation of data.	40
Proposal Part # 5 – Preliminary Recommendations: Students are required to draw conclusions from the preliminary results, and to make recommendations based on those conclusions. Limitations should also be discussed.	20

Homework and Class Activities/Assignments: Students will complete small assignments and activities throughout the semester that will assist in their understanding of the research process. Often these activities will feed directly into the graded assignments. These activities will be graded on the basis of completion.	50
CITI Training and Certification: Students are required to complete Collaborative Institutional Training Initiative (CITI) Human Subjects Research training – Instructions Provided.	20
Plagiarism Learning Module and Assignment: Students are required to complete the plagiarism learning module on Blackboard– Instructions Provided.	25
APA Learning Module and Assignment: Students are required to complete the APA learning module on Blackboard– Instructions Provided.	25
SPSS Assignments: Students are required to complete three stats assignments that will introduce them to SPSS, help them prepare a data file, conduct preliminary descriptive analyses, and conduct correlation, t-test and one-way ANOVA statistical analyses– Instructions Provided.	60
Final Proposal: Students are expected to use feedback from all previous assignments to complete the final proposal. The proposal must include all components discussed in the text (see rubric and assignment sheet for details), as well as sections for preliminary results and recommendations/implications. Final papers are typically in the range of 20 - 30 pages of text but no minimum or maximum page requirements are mandated. You will have the option of writing either an academic report or a professional report. All papers are to be typed, 1inch margins, 12-point font, follow APA formatting guidelines (double-spaced, in text references, reference list). Spelling, grammar, and formatting mistakes will count against the overall grade of the assignment – Rubric and Guidelines Provided.	100
Total	600

Other Requirements

- Regular video attendance is expected. It enhances your academic success to be in every scheduled session. Attendance at the three on-campus lab sessions is required. If you feel at risk attending these face-to-face sessions, let your instructor know as soon as possible so that we can make other arrangements. Attendance will be taken, and failure to show up to class can result in you missing valuable information and assignments.

- Class participation is extremely important, but obviously, it is quality, not quantity that counts. We can all learn from each other. It is expected that when you have some special knowledge or relevant experience you will contribute it to the learning of the other members of the class. Useful contributions, as you know, come in many forms. Sometimes a question or a brief comment can be as or more useful to the learning of the class as a long presentation. Even your mistakes and misunderstandings can lead to learning opportunities for us all. Please speak up in all class sessions.

Grading

This course will be graded on a points basis, with 600 possible points.

A	= 564 – 600	B+	= 528 – 539	C	= 444 – 479
A-	= 540 – 563	B	= 504 – 527	F	= 0 – 443
		B-	= 480 – 503		

Professional Dispositions

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

Always come to class (virtually) with a positive attitude and try to have fun as you learn about yourself, others, and the topic at hand! Much of the value of the course will be generated from in-class activities and discussion. As such, you are asked to prepare for discussion by reading assigned items (prior to class) and actively participate in the conversation.

I expect you to uphold the highest ethical standards and academic integrity. This includes refraining from cheating, fabrication, and plagiarism.

Virtual classrooms can make it difficult to connect with others. Please do your best to be visible to your classmates by turning on your video. One day, we will actually see one another in person. It will be nice to be familiar with one another beforehand.

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

	Wk1: 8.26	Intro to research and the class		
Module 1	Wk2: 9.2	What do you want to know? Background & Problem, RQ, justification	Ethics CITI training	
	Wk3: 9.16	Informing your research How to find literature		
Module 2 informing your research	Wk4: 9.16	How to read & critique literature Summarizing & citing research Value of theoretical frameworks	APA	
	Wk5: 9.23	Mapping literature Relationships and gaps Writing a literature review	Plagiarism	
Module 3 Quantitative methodology Quantitative data analysis	Wk6: 9.30	Research designs, sampling		
	Wk7: 10.7	Measurement Reliability and validity		
	Wk8: 10:14	Preparing data for analysis in SPSS Descriptive Statistics	SPSS assignment 1	
	Wk9: 10:21	Examining Differences	SPSS assignment 2	
	Wk10: 10:28	Looking for Associations	SPSS assignment 3	
Module 4 Qualitative methodology Qualitative Analysis	Wk11: 11.4	Research designs, sampling		
	Wk12: 11.11	Reliability and validity		
	Wk13: 11.18	Data analysis: Coding methods		
	Wk14: 11:25	Interpreting Qualitative Data		
Module 5	Wk15: 12.2	Telling your story		
	Exam Period		Final Proposal due	

Core Values Commitment

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

GMU Policies and Resources for Students

Policies

- Students must also 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.

- Students must adhere to the guidelines of the Mason Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).

- Students must follow the university policy for Responsible Use of Computing (see http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/).

- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.

- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see http://ods.gmu.edu/).

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 http://coursessupport.gmu.edu/.
- 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

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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/ .