



**KENNESAW STATE
UNIVERSITY**

SYLLABUS

NORMAN J. RADOW COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF GEOGRAPHY AND ANTHROPOLOGY

GEOG 2200-W01: RESEARCH METHODS IN GEOGRAPHY AND ENVIRONMENTAL STUDIES

FALL 2021

Course Information

Class meeting time: Online, Asynchronous

Modality and Location: Online, Asynchronous

COVID-19 Course Information:

Course Delivery: KSU may shift the method of course delivery at any time during the semester in compliance with University System of Georgia (USG) health and safety guidelines. In this case, alternate teaching modalities that may be adopted include hyflex, hybrid, synchronous online, or asynchronous online instruction.

COVID-19 Vaccines: COVID-19 vaccines are a critical tool in "Protecting the Nest." If you have not already, you are strongly encouraged to get vaccinated immediately to advance the health and safety of our campus community. As an enrolled KSU student, you are eligible to receive the vaccine on campus. Please call (470) 578-6644 to schedule your vaccination appointment or you may walk into one of our student health clinics. More info about COVID-19 vaccination at KSU is here: <https://campusservices.kennesaw.edu/coronavirus/covid-19-vaccination.php>

Face Coverings: Based on guidance from the University System of Georgia (USG), all vaccinated and unvaccinated individuals are encouraged to wear a face covering while inside campus facilities. Unvaccinated individuals are also strongly encouraged to continue to socially distance while inside campus facilities, when possible.

COVID-19 illness: If you are feeling ill, please stay home and contact your health professional. In addition, please email your instructor to say you are missing class due to illness. Signs of COVID-19 illness include, but are not limited to, the following: Cough; Fever of 100.4 or higher; Runny nose or new sinus congestion; Shortness of breath or difficulty breathing; Chills; Sore Throat; New loss of taste and/or smell. For more information regarding COVID-19 (including testing, vaccines, extended illness procedures and accommodations), see KSU's official Covid-19 website: <https://www.kennesaw.edu/coronavirus/>

Instructor Information

Name: Dr. Paul N. McDaniel, Associate Professor of Geography

Email: paul.mcdaniel@kennesaw.edu

Office Location: Math & Statistics Building (MS) 236 (a [SafeSpace](#))

Office phone: 470-578-4918

Office Hours: Virtual by appointment via Microsoft Teams

Preferred method of communication: Email (fastest response) or D2L Message

Faculty Web: <http://facultyweb.kennesaw.edu/pmcdan11>

Email and Classroom Response Times: I will check my email and D2L messages at least once a day, not including weekends or holidays. Monday through Friday, I will respond to all emails within 24 hours. Over the weekend (starting Friday at 5 p.m.) I will respond to all emails on Monday. Please contact me when you have questions or need clarification. Please refer to the KSU Writing Center [Guide on Writing Professional Emails](#).

The professor reserves the right to revise this syllabus at his discretion.

Course Description

This course is designed to prepare students for scientific research in the environmental field and related disciplines. It introduces students to a variety of spatial and environmental research concepts, approaches, methods and techniques. This course guides students through aspects of scientific research. 3 credit hours.

Course Materials

Required Texts: There is one required textbook for this course:

- *An Introduction to Scientific Research Methods in Geography and Environmental Studies*, 2013, second edition, by Daniel R. Montello and Paul C. Sutton, from Sage Publications, ISBN: 9781446200759.

Recommended Texts: To add further context to textbook concepts, class discussions, and ongoing current events, a select set of supplemental readings may be made available at the discretion of the instructor. These readings may be drawn from newspapers, magazines, academic journals, book chapters, etc., and would be made available to students online via D2L. Please note that every attempt will be made to include the research and work done by researchers and scholars who have contributed to geographic thought who are often underrepresented in academia, including integrating research and readings by scholars of various races and ethnicities, genders, sexual orientations, abilities, and other aspects of intersectionality.

Technology requirements: You will need access to a computer with an internet connection to access the D2L course site. To view some course materials, you will also need Adobe Reader to view PDF files, MS PowerPoint to view the lecture slides, MS Word or another word processor to view some course documents and to complete the research paper. To function in this online course, you will also need to be able to use basic Internet functions, be familiar with using KSU's Desire2Learn (D2L) online learning management system, and regularly check your KSU email and D2L messages and announcements.

Learning Outcomes

Students who successfully complete this course should be able to:

- Describe basic geographic/environmental research concepts and methods.
- Review geographic/environmental research methods in geography/environmental literatures.
- Design research projects in their fields of interest.
- Apply research methods to their own research projects.
- Develop writing skills to present and disseminate their research and findings.

Course Requirements, Assignments, Evaluation, and Grading Policies

All activity due dates are clearly listed in the chart below, in the module schedule further below in this syllabus, in D2L on each individual activity page, and in the D2L course calendar. You are also encouraged to add course due dates to your own calendar system and set reminders.

Activity	Points	Due Dates (each activity is due on D2L by 11:59 PM on the date specified)
<p>Ten Reading Quizzes. In order to be prepared for class discussions and to adequately participate in class, students must read the corresponding chapters in the textbook (and any other assigned readings as announced) by the beginning of the week in which the reading is assigned (see syllabus schedule below). Ten reading quizzes are scheduled throughout the semester. The ten textbook reading quizzes are worth 10 points each for a total of 100 possible points for the course.</p>	<p>100 points (20%)</p>	<p>Quiz 1: August 19 Quiz 2: August 26 Quiz 3: September 2 Quiz 4: September 9 Quiz 5: September 16 Quiz 6: September 23 Quiz 7: September 30 Quiz 8: October 14 Quiz 9: November 4 Quiz 10: November 11</p>
<p>Five Discussion Activities. There will be five discussions throughout the semester completed in the discussions forum on D2L. Each discussion is out of 20 points for a total discussions grade of 100 possible points for the course. For each discussion, please respond to the discussion prompt using the discussion grading rubric below as a guide; and please also respond to at least three other classmates' posts.</p> <ol style="list-style-type: none"> 1. Discussion 1: Introduce Yourself 2. Discussion 2: Scientific Research and Fundamental Research Concepts 3. Discussion 3: Data Collection 4. Discussion 4: Statistical Data Analysis, Data Display, and Ethics in Scientific Research 5. Discussion 5: Reflection on KSU Symposium of Student Scholars 	<p>100 points (20%)</p>	<p>Discussion 1: August 19 Discussion 2: August 26 Discussion 3: October 7 Discussion 4: November 18 Discussion 5: December 2</p>

<p>Five Assignments (each of these are building blocks for constructing your Research Proposal Paper). Throughout the semester, students will complete assignments that apply concepts from readings and discussions and also form the components and building blocks of their research proposal papers that will be due by the end of the course. These specific written assignments (see week-by-week schedule below for due dates) build upon each other and include developing a potential research topic, developing specific research questions, constructing a literature review, and describing the study area, methodology, and data sources. All assignments and research proposal components will be submitted electronically on the D2L course site.</p> <ol style="list-style-type: none"> 1. Assignment 1 (5 points): IRB CITI Training, “Students Conducting No More Than Minimal Risk Research” (see instructions on the assignments drop box on D2L, and use that folder to submit your completion certificate). 2. Assignment 2 (10 points): List of three potential research topics for your research proposal. 3. Assignment 3 (15 points): Literature search, evaluation, and annotated bibliography. 4. Assignment 4 (10 points): Description of research questions for your research proposal. 5. Assignment 5 (60 points): Full Draft of your research proposal paper. This will also be used for the Research Proposal Peer Review Assignment. 	<p>100 points (20%)</p>	<p>Assignment 1: August 26 Assignment 2: September 2 Assignment 3: September 16 Assignment 4: September 30 Assignment 5: October 28</p>
<p>Research Proposal Peer Review Assignment. After you turn in the full draft of your research proposal paper, the instructor will distribute your paper draft to other students in the class. Each student, from the perspective of an editor reviewing a draft manuscript for scholarly journal article publication, must read and review one other student’s research project paper draft and send comments back to the author and to the instructor. The author may send the responses back to the reviewer and the instructor and make necessary revisions or respond to the feedback in the discussion. The peer review will be graded based on how you review another student’s research project paper draft and how you respond to another student’s and instructor’s comments on your own paper draft.</p>	<p>50 points (10%)</p>	<p>November 11</p>
<p>Final Research Proposal Paper. Students will spend time throughout the course developing a research proposal in a particular field of geography or environmental studies based on their research interests. The various components of the research proposal paper (see “assignments” above) will be due at different points throughout the semester (see syllabus week-by-week schedule below for due dates). The final research proposal paper will also go through a peer review with other students in the class. However, the full/final research proposal paper will be graded only once—at the end of the semester. More detailed requirements for the paper are described below. The final research proposal paper is out of 100 points (see grading rubric below). It is due via D2L dropbox on the last day of class per the due date indicated in this syllabus. See detailed instructions and research proposal paper grading rubric further below in this syllabus.</p>	<p>100 points (20%)</p>	<p>December 6</p>
<p>Participation. Active participation in class discussions and all other components of the course is important. Consider our class as an assemblage of individuals that is unique and irreplaceable. Irregular participation not only hurts a student's course work, but it weakens the class as a whole. Students are expected to participate in all class activities and discussions, complete all written assignments and research proposal components, and complete assigned readings by the beginning of the week in which the reading is assigned (refer to schedule presented in this syllabus) in order to actively participate in the class each week.</p>	<p>50 points (10%)</p>	
<p>TOTAL</p>	<p>500 points</p>	

Final course grades will be assigned based upon the total points from the items above out of 600 total possible points, computed to a percentage according to the grade guideline below.

Percentage Grade	Letter Grade
90-100	A
80-89	B
70-79	C
60-69	D
59 and below	F

Grading Rubric for Each Discussion Activity

	Exemplary	Midpoint	Unsatisfactory
Content	4 points Post contains unique and novel ideas. Shows you have thought critically about the material and addresses all questions in the prompt.	2 points Post is substantial but does not show much critical thinking about the topic. Mainly summarizes the main point or restates what has already been said by others.	0 points Post has little substance, off topic, does not contribute to the discussion.
Spelling and Grammar	4 points 0-4 spelling and/or grammar mistakes.	2 points 5-9 spelling and/or grammar mistakes.	0 points 10+ spelling and/or grammar mistakes.
Reference and Support	4 points The post has clearly and explicitly referenced material to the text and lecture slides to reinforce the opinion/statements.	2 points Some material are referenced.	0 points There is no clear support for the statements.
Length of Post	4 points Post is 350 words or more.	2 points Post is 201 to 349 words.	0 points Post is less than 200 words.
Meaningful Response to 3 Other Students' Posts	4 points At least three responses are each 50 words or more and shows strong evidence of thought.	2 points Responses are 25 to 49 words OR don't show strong evidence of thought OR fewer than 3 responses.	0 points No response posts.
Total	20 points	10 points	0 points

Research Proposal Paper (20 percent of total course grade):

Students will spend time throughout the course developing a research proposal in a particular field of geography or environmental studies based on their research interests. The various components of the research proposal paper (see "assignments" above) will be due at different points throughout the semester (see syllabus week-by-week schedule below for due dates). The final research proposal paper will also go through a peer review with other students in the class. However, the full/final research proposal paper will be graded only once—at the end of the semester. More detailed requirements for the paper are described below. The final research proposal paper is out of 100 points (see grading rubric below) and makes up 20% of the total course grade. It is due via D2L dropbox on the last day of class.

Structure of Research Proposal Paper:

In general, the research proposal paper should have the following or similar components (not necessary to follow this structure, but should be logical). The paper should be organized into sections with section headings (and subheadings if needed).

1. Introduction: an overview of your research question(s).
2. Background: Background information about your topic to help readers understand your research concepts, question(s), and context.
3. Literature Review: You should read at least 10 literatures (i.e., peer-reviewed academic journal articles, scholarly book chapters, or other scholarly work) relevant to your research questions and methods. They may be peer-reviewed journal papers, book chapters, or books you can get from the library and electronic databases searchable through the Library or Google Scholar. The literature review is a summary of the previous studies relevant to your area of research and research question(s). You should discuss the differences between your proposed study and the previous studies, the limitations in the previous studies, any improvements your study may make, and why your study is needed to contribute or fill a gap in the particular area of knowledge.
4. Research Objectives: Provide detailed research purposes and questions or any hypotheses you want to test.
5. Study Area: Most geographic topics are for a specific place, area, or region. Describe the information relevant to the research questions in the study area (physical, social, historical, environmental, cultural, etc.).
6. Data Sources and Methodology: Clearly describe how you will collect the data and the methods you plan to use to explore and interpret the data and address the research questions. A flow chart may help you organize the methodology and make it easier to understand.
7. Results: Describe potential and/or expected results and how they will help to answer the research questions and hypotheses.
8. Conclusion: Tie everything back together with the broader literature and describe any scientific, social, and practical contributions your research may make. Also make suggestions for future research related to this topic.

9. References: List the literatures in a standard and consistent bibliographic format, such as APA, MLA, or Chicago Style. The key is to choose one style and remain consistent with in-text citations and reference list/bibliography format. If you don't have any idea of a particular reference citation format, look at one of the peer-reviewed journal articles you reference in your research project paper and follow its particular citation and reference format. Consistency is key!

Grading Rubric for Research Proposal Paper:

	Exemplary	Midpoint	Unsatisfactory
Structure of the Research Paper	30 points Paper includes all required sections (Introduction, Background, Literature Review, Research Objectives/Questions, Study Area, Data Sources/Methodology, Results, Conclusion, References).	15 points Paper contains some of the required sections.	0 points Paper did not follow any of the directions for organization and content.
In-Text Citations	15 points All sources listed in the reference list are cited in the text of the paper	7.5 points Some citations are in the text, but not all sources in the bibliography are cited	0 points No citations from the reference list. PAPER WILL BE GRADED "D" OR LOWER.
Reference List	15 points 10+ sources, alphabetized, follows standard citation format, majority scholarly sources	7.5 points 5-9 sources, needs formatting attention, may or may not have scholarly sources	0 points 1-4 sources, bibliography not alphabetized, poorly formatted
Maps & Images	10 points Paper has 1+ map and 1+ image, both referred to in the text.	5 points Paper has only one map or image, may or not be referred to in text.	0 points No maps, no images.
Proof-reading	10 points 0-9 spelling and/or grammar mistakes.	5 points 10-19 spelling and/or grammar mistakes	0 points 20+ spelling and/or grammar mistakes.
Length of paper	10 points Paper has 10 or more pages of text (excluding figures, tables, images, references), double-spaced, Times New Roman 12 point font, 1-inch margins.	5 points Paper has 8-9 pages of text, doesn't follow font/margin formatting.	0 points Paper has less than 8 pages of text, doesn't follow font/margin formatting.
Subheadings (these add focus)	10 points Subheadings are sufficient for the various required sections of the research paper.	5 points Few subheadings, confusing to the reader, and/or don't follow the required sections for the paper.	0 points No subheadings
TOTAL	100 points	50 points	0 points

Research Proposal Paper Peer Review Assignment:

After you turn in a draft of the research proposal paper, the instructor will distribute your paper draft to other students in the class. Each student, from the perspective of an editor reviewing a draft manuscript for scholarly journal article publication, must read and review one other student's research project paper draft and send comments back to the author and to the instructor. The author may send the responses back to the reviewer and the instructor and make necessary revisions or respond to the feedback in the discussion. The peer review will be graded based on how you review another student's research project paper draft and how you respond to another student's and instructor's comments on your own paper draft.

Course Policies

Financial Aid Attendance Compliance: You are responsible for determining your enrollment status in all classes to protect your financial aid monies. NOT ATTENDING A CLASS FOR WHICH YOU ARE REGISTERED IS NOT THE SAME AS **WITHDRAWING FROM THE COURSE**. You must complete an online withdrawal to be removed from a course. If you stop attending class but do not complete an online withdrawal BEFORE the last day to drop without academic penalty, you will receive a grade of WF, which counts as an F in calculating your grade point average and counts as a completed course for

determining your financial aid award. **Class Participation.** For this class, you should be diligent about reading the required textbook as in-class discussions and exams are based on content directly from the textbook. Attendance will be taken on random class meeting days throughout the semester. Consider our class meetings an assemblage of individuals that is unique and irreplaceable. Irregular attendance not only hurts a student's course work, but it weakens the class as a whole. If you need to miss a class for a reasonable reason, please let me know via email ahead of your planned absence. If you have an unplanned absence, please let me know about the reason via email as soon as possible after the absence occurs. Also, plagiarism and academic dishonesty will not be tolerated. Please see the statements on Academic Honesty and Plagiarism Policy in the University Policies section later in this syllabus.

Institutional Policies

Institutional Policies are found at this link: [Federal, BOR, & KSU Course Syllabus Policies](#)

Non-Discrimination Statement: Kennesaw State University (KSU) is committed to maintaining a fair and respectful environment for living, work and study. To that end, and in accordance with federal and state law, Board of Regents policy, and University policy, the University prohibits harassment of or discrimination against any person because of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity, gender expression, ethnicity or national origin, religion, age, genetic information, disability, or veteran status by any member of the KSU Community on campus, in connection with a University program or activity, or in a manner that creates a hostile environment for members of the KSU community. <http://diversity.kennesaw.edu/>

KSU Student Resources

This link contains information on help and resources available to students: [KSU Student Syllabus Resources](#)

Course Schedule

Below is an outline of the content and activities in each module of the course. Due dates are listed in the Due Date column below, in the grade component chart earlier in this syllabus, and in the D2L course calendar online. All items for a grade will be completed in the D2L course site and all due dates for activities are in Eastern Time and are due by 11:59 PM on D2L on the specified due date.

Week	Dates/Modules	Readings/Content/Activities/Items Due	Due Date
1	August 16-19 Module 0: Start Here Module 1: Introduction	Chapter 1: Introduction: A Scientific Approach to Geography and Environmental Studies Overview and introduction to the class, use of D2L for assignment submission and interaction with class. Due August 19: <ul style="list-style-type: none"> ▪ Discussion 1: Introduce Yourself ▪ Quiz 1 	August 19: Discussion 1: Introduce Yourself Quiz 1
2	August 23-26 Module 2: Fundamental Research Concepts	Chapter 2: Fundamental Research Concepts How to generate research ideas and questions Article Reading: "The Big Questions in Geography" by Cutter, Golledge, and Graf, <i>Professional Geographer</i> , 2002. Due August 26: <ul style="list-style-type: none"> ▪ Quiz 2 ▪ Discussion 2: Scientific Research and Fundamental Research Concepts ▪ Assignment 1: CITI Certification 	August 26: Quiz 2 Discussion 2 Assignment 1: CITI Training
3	August 30- September 2 Module 3: Scientific Communication	Chapter 3: Scientific Communication How to get literatures from the library and electronic journal databases; How to give background information and perform literature review Due September 2: <ul style="list-style-type: none"> ▪ Quiz 3 ▪ Assignment 2: List of three potential research topics for your research project paper 	September 2: Quiz 3 Assignment 2: List of three potential research topics

4	September 7-9 Module 4: Data Collection	Chapter 4: Data Collection in Geography and Environmental Studies: Overview, How to describe your research questions September 4-6: Labor Day Holiday Due September 9: ▪ Quiz 4	September 9: Quiz 4
5	September 13-16 Module 5: Physical Measurements	Chapter 5: Physical Measurements Due September 16: ▪ Quiz 5 ▪ Assignment 3: Literature Search, Evaluation, and Annotated Bibliography	September 16: Quiz 5 Assignment 3: Literature Search, Evaluation, and Annotated Bibliography
6	September 20-23 Module 6: Behavioral Observations and Archives	Chapter 6: Behavioral Observations and Archives Due September 23: ▪ Quiz 6	September 23: Quiz 6
7	September 27-30 Module 7: Explicit Reports, Surveys, Interviews, Tests	Chapter 7: Explicit Reports: Surveys, Interviews, and Tests Due September 30: ▪ Quiz 7 ▪ Assignment 4: Description of research questions for your research proposal paper	September 30: Quiz 7 Assignment 4: Description of research questions
8	October 4-7 Module 8: Experimental and Nonexperimental Research Designs	Chapter 8: Experimental and Nonexperimental Research Designs Due October 7: ▪ Discussion 3: Data Collection	October 7: Discussion 3
9	October 11-14 Module 9: Sampling	Chapter 9: Sampling Important data sources in geography and environmental studies Due October 14: ▪ Quiz 8	October 14: Quiz 8
10	October 18-21 Module 10: Statistical Data Analysis	Chapter 10: Statistical Data Analysis Watch: "The Joy of Stats" documentary film: https://amara.org/en/videos/2sYDM1U9DMa8/en/5966/ October 21: Last day to withdraw without academic penalty	
11	October 25-28 Module 11: Data Display	Chapter 11: Data Display: Tables, Graphs, Maps, Visualizations Due October 28: Assignment 5: Full Draft of your research proposal paper	October 28: Assignment 5: Draft of your research proposal paper
12	November 1-4 Module 12: Reliability and Validity	Chapter 12: Reliability and Validity Due November 4: Quiz 9	November 4: Quiz 9

13	November 8-11 Module 13: Information Technologies in Research	Chapter 13: Information Technologies in Research Geographic Information Systems (GIS) Due November 11: <ul style="list-style-type: none"> ▪ Quiz 10 ▪ Research Proposal Peer Review Assignment: Peer Review of Classmates' Research Proposal Paper drafts 	November 11: Quiz 10 Research Proposal Peer Review Assignment
14	November 15-18 Module 14: Ethics in Scientific Research	Chapter 14: Ethics in Scientific Research Due November 18: Discussion 4: Statistical Data Analysis, Data Display, and Ethics in Scientific Research November 18: KSU Symposium of Student Scholars , held virtually on Microsoft Teams. Need to attend one or more research presentation session in order to complete Discussion 5 (due December 2). More info here: https://research.kennesaw.edu/our/symposium-student-scholars/fall-edition.php	November 18: Discussion 4
15	November 22-28	Fall Break: No Classes. Happy Thanksgiving! November 21-22: Dr. McDaniel at Southeastern Division of American Association of Geographers (SEDAAG) annual meeting. https://sedaag.org/ November 25: Thanksgiving Holiday	
16	November 29- December 6 Module 15: Research Proposal Peer Review and Final Paper	Spend this week reviewing feedback on your drafts from the instructor and from the peer review assignment process, and use the feedback to finalize the final version of your research proposal paper, which is due by December 6. Due December 2: Discussion 5: Reflection on KSU Symposium of Student Scholars Due December 6: Final Research Proposal paper December 6: Last day of classes for Fall 2021 Semester.	December 2: Discussion 5 December 6: Final Research Proposal Paper