

# **GEOG 703: Research Design**

## **Spring 2019 Class meets:**

Tuesdays 3:30-6:30pm in 321 Carolina Hall

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Office hours: 1:45-2:45 Tuesdays and Thursdays or by appointment

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## **Course Overview**

Research design is one of the most important areas of graduate study in any discipline. Designing a good research project requires an understanding of the general field in which the research will take place, an appreciation for the questions that will advance the state of knowledge in that field, an ability to select and apply the methods appropriate to studying the selected research questions, formulating approaches to assess uncertainty in your analyses and to validate results, and, perhaps most importantly, perseverance. In this class, we will discuss some of the basic concepts and tools for designing a research project. Although the immediate goal is to write your own research proposal, the general goals are much broader. As students of any discipline, we should understand the nature, purpose and value of doing and communicating research.

## **Course Objectives**

- 1) To understand the theoretical and practical implications of designing a research project;
- 2) To formulate research questions and tie them to the appropriate literature fields, methods and theoretical framework;
- 3) To learn how to write a research proposal that will secure outside funding;
- 4) To write a research proposal.

## **Assignments and Research Proposal**

The main product from this class will be a research proposal that has been reviewed by your classmates, revised, and then presented. This course will involve several hours a week of reading, research and writing. Writing a proposal takes A LOT of time (my rule of thumb is 2-3 times what I think it will take). Much of the coursework will be targeted towards thinking through your own research, however, so time invested will hopefully pay off in terms of progress towards the thesis or dissertation. Throughout the class we will read a book about research design. Please read the material before class and we will discuss it. We also read several examples of successful and unsuccessful proposals and their reviews. Probably the most important and difficult part of the research process is coming up with a good idea and then

formulating a good question based on that idea. Once you have that you need to develop a comprehensive literature review that identifies pertinent research that has been done previously that is related to your topic. This will involve a literature search using library resources. About two-thirds of the way through the semester you will give your classmates a complete NSF research proposal that includes all required sections that are part of the Doctoral Dissertation Research Improvement grant. Students will prepare their proposals using the online NSF fastlane system ([fastlane.nsf.gov](http://fastlane.nsf.gov)). Students will review all other student proposals using NSF review criteria. Students will then take the reviews and revise their proposals based on the reviews and hand in a final proposal and present the proposal to the class.

All deliverables as well as weekly reading reflections (described below) are to be put in a course portfolio each week before the class that they are due. Each item in your portfolio should have your name and the week number. Your portfolio items should be put in your Sakai Drop Box each week before class. A list of the course deliverables follows:

- Reviews of NSF example proposals (Assignments 1 & 2)
- 2 paragraph research concept paper with underlined research question (Assignment 3)
- Proposal outline (Assignment 4)
- Literature review (Assignment 5)
- Complete NSF proposal with budget and justification (Assignment 6)
- NSF proposal reviews for all class proposals (Assignment 7)
- Proposal presentations
- Revised NSF proposal

We will read a book called “Proposals that Work: A Guide for Planning Dissertations and Grant Proposals, 6<sup>th</sup> Edition” by Locke, Spirduso, and Silverman. You can get it from the UNC bookstore through this [link](#). Please read the chapters assigned before the class period listed on the schedule below. We will discuss the chapter and so everyone must have read it thoroughly in order to facilitate the discussion. Everyone has something to offer including their own research experiences that will inform the discussion. You should type a few paragraphs each week (reading reflections) summarizing the three most useful things you learned from the readings for that day. Your daily reading reflections should be about a page long. Everyone needs to be an active participant in these class discussions so please bring digital or hard copies of your reading reflections with you to class.

Note: The immediate goal of this class is to design a viable research project thus you will need to be meeting regularly with your advisor in order to discuss your research questions, literature, and methods. Your advisor should be involved throughout the semester - don't waste the opportunity! You do not need to be working on your dissertation project or proposal in this class if you are not yet at that stage in your studies! This class is for your own benefit and to explain some of the aspects of research design considered integral to the discipline. If you do not want to work on your dissertation proposal, just pick a project that will sustain your interest for the semester and allow you to develop a workable proposal. If you do intend to develop a dissertation proposal, you will need to engage your committee chair to help frame research questions and to structure your proposal.

**Schedule (See Sakai Site for Assignments which should be done before class on the day listed; the readings that are not chapters in the book are on the Sakai Site as well)**

<b>Week: Date</b>	<b>Readings/ Assignments/ Deliverables</b>	<b>What we will do in class (tentatively)</b>
Week 1: January 15	Course Overview	Go over syllabus in detail. Meet class members. Talk about our research interests.
Week 2: Jan 22	Chapter 1: The function of the proposal  Come to class with a research idea which you'll tell the class about.  Assignment 1: Developing thick skin	<ol style="list-style-type: none"> <li>1. Discuss Doyle Manifesto</li> <li>2. Discuss Watts essay</li> <li>3. Discuss Preface and Chapter 1</li> <li>4. Each person will discuss their research idea while another class member will summarize what they say on the whiteboard. We'll divide the time equally among class members. At the end of the time the person will take a picture on their phone and email it to themselves. This is the first draft of your research idea.</li> <li>5. If we have time we'll discuss the first proposal and review in Assignment 1</li> </ol>
Week 3: Jan 29	Assignment 1: Developing thick skin (Assignment 1 materials due on Sakai Drop Box before class)	<ol style="list-style-type: none"> <li>1. Discuss review process in general</li> <li>2. Discuss all proposals and reviews in Assignment 1</li> </ol>
Week 4: Feb 5	Chapter 2: Doing the Right Thing: "The Habit of Truth" and the Research Ethics PPT on Sakai readings  Assignment 2: Good proposals and fuzzy reviews (Assignment 2 materials due on Sakai Drop Box before class)	<ol style="list-style-type: none"> <li>1. Discuss Chapter 2 and research ethics PPT</li> <li>2. Discuss all of Assignment 2 proposal and reviews. We will hold a mock NSF panel and discuss each proposal separately with primary, secondary, and panel</li> </ol>

		discussions of proposals. It's possible that we won't finish all of the reviews today and if we don't we'll continue the following week.
Week 5: Feb 12	Chapter 3: Developing the Thesis or Dissertation Proposal  Assignment 3: Developing a research question and concept	<ol style="list-style-type: none"> <li>1. If we don't finish all reviews from Week 4 we will finish</li> <li>2. Discuss Chapter 3</li> <li>3. Begin to discuss Assignment 3 deliverable. You should have a well-developed question, hypotheses, and justification to share with class.</li> </ol>
Week 6: Feb 19	Literature Review: meet in Davis Library Room 247.	<ol style="list-style-type: none"> <li>1. Read pages 63-73</li> </ol>
Week 7: Feb 26	Chapter 4: Content of the Proposal: Important Considerations  Assignment 3: Developing a research question and concept (Assignment 3 materials due on Sakai Drop Box before class)	<ol style="list-style-type: none"> <li>1. Discuss Chapter 4</li> <li>2. Finish discussing Assignment 3 deliverable.</li> <li>3. Elevator speech one page research description, i.e., idea, question, justification</li> </ol>
Week 8: Mar 5	Chapter 5: Preparation of Proposals for Qualitative Research  Assignment 4: Designing and preparing a proposal	<ol style="list-style-type: none"> <li>1. Discuss Chapter 5</li> <li>2. Discuss NSF GSS Program and other programs Discuss the Grant Proposal Guide and different parts of the NSF proposal</li> <li>3. Begin discussing Assignment 4 deliverable. Begin discussing the outline and structure of each class member's evolving proposal. You should be adding in at least skeletal sections for literature review, background, and methods.</li> </ol>

<p>Week 9: Mar 19</p>	<p>Chapter 6: Style and Form in Writing the Proposal</p> <p>Assignment 4: Designing and preparing a proposal (Assignment 4 materials due on Sakai Drop Box before class)</p>	<ol style="list-style-type: none"> <li>1. Discuss Chapter 6</li> <li>2. Discuss NSF fastlane</li> <li>3. Finish discussing Assignment 4 deliverable.</li> </ol>
<p>Week 10: Mar 26</p>	<p>Chapter 7: The Oral Presentation</p> <p>Assignment 5: Literature review</p>	<ol style="list-style-type: none"> <li>1. Discuss Chapter 7</li> <li>2. Begin discussing Assignment 5 deliverable. Each class member will make a short verbal presentation that describes the main ideas described in the literature review and how their question will fill a gap in the literature.</li> </ol>
<p>Week 11: Apr 2</p>	<p>Chapter 8: Money for Research</p> <p>Assignment 5: Literature review (Assignment 5 materials due on Sakai Drop Box before class)</p>	<ol style="list-style-type: none"> <li>1. Discuss Chapter 8</li> <li>2. Finish discussing Assignment 5 deliverable.</li> </ol>
<p>Week 12: Apr 9</p>	<p>Chapter 9: Preparation of the grant proposal and Wuchty et al. on Sakai readings</p> <p>Assignment 6: Dissemination (Assignment 6 materials due on Sakai Drop Box before class)</p>	<ol style="list-style-type: none"> <li>1. Discuss Chapter 9</li> <li>2. Discuss Wuchty et al. paper</li> <li>3. Class exercise on Proposal Methods</li> </ol>
<p>Week 13: Apr 16</p>	<p><b>Proposals due today at the beginning of class (must be one PDF document produced in Fastlane)</b></p> <p>Dissemination discussion</p>	<ol style="list-style-type: none"> <li>1. Discuss Assignment 6 (Parts 4 and 5) deliverable.</li> <li>2. We will develop a batting order for the class review panel which will take place during Week 14. Each proposal will be assigned a primary, secondary, and tertiary reviewer.</li> </ol>
<p>Week 14: Apr 23</p>	<p>Assignment 7: Proposal review and revision (Assignment 7 materials due on Sakai Drop Box before class)</p>	<ol style="list-style-type: none"> <li>1. Class proposal review panel for entire class. We will begin with primary, secondary, and tertiary reviews followed by comments by all other class</li> </ol>

		members. This will be followed up with the proposal writer being given the opportunity to ask questions of the review panel. Read Assignment 7 for instructions.
Exam time: April 30 4-7pm	Proposal Presentation and Critique  <b>Final Proposal Due</b> (Proposal and PPT presentation due on Sakai Drop Box before class)	1. Present 10 minute presentation of your project proposal to classmates. Must students will present a PowerPoint presentation- see Assignment 7 Part 5.

## Grading

You will be graded throughout the semester in three areas: a) participation in class, which is a combination of physical and mental attendance; b) weekly assignments that will include readings, leading discussions, and reviews; and c) a final research proposal to be submitted both as a written document and presented to the department in the form of a talk. You will keep a portfolio of materials and add to it each week. This will include both the deliverables described in each of the assignments and the deliverables required for each reading. You are also required to attend the weekly Geography Colloquium series on Fridays from 3:30-5pm each week. You must also hand in a research ethics training certificate in order to pass the class (described in Assignment 1). If you don't hand in ALL complete assignments on time you will not get an H in the class. You are expected to come to ALL classes and be on time each day and stay until the end of class. If you must miss class or the colloquium for valid reasons such as illness or for a religious holiday then please come to see the instructor and you will be given makeup assignments.

Weekly assignments: 50% Final proposal and presentation: 50%