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Fall 9-1-2018

### GPHY 504.01: Research Design in the Geographical Sciences I

Sarah Halvorson

*University of Montana - Missoula*, [sarah.halvorson@umontana.edu](mailto:sarah.halvorson@umontana.edu)

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# **GPHY 504: RESEARCH DESIGN I**

(Formerly known as Introduction to Geographical Research)

**Fall Semester 2018**  
**Wednesdays 2:00 – 2:50 pm**

**Sarah J. Halvorson, Ph.D.**

Department of Geography  
Stone Hall Room 211

Phone: 406-243-2793, Fax: 243-4840

Email: sarah.halvorson@umontana.edu

Office Hours: M 12-2:00, TR 11-noon and by appointment

## **Course Overview**

### **Course Description**

*Research Design I* is a one-credit course that is part of a required two-course sequence with the two-credit course *Research Design II* (GPHY 505). The overall aim of this course sequence is to help students broaden their understanding of the diversity of empirical, theoretical, and methodological approaches within the discipline of Geography. Further, the intention is to provide a launching point for gaining the necessary background and skills in geographic inquiry and for producing meaningful, significant, and rigorous research that is worthy of a graduate degree.

### **Objectives**

GPHY 504 has the explicit objective of assisting graduate students in developing a strategy for undertaking a significant research project. This semester you will be expected to situate yourself within the discipline of geography and to complete the course with a research topic in hand. In *Research Design II* (GPHY 505), you will develop your own research proposal for a thesis, dissertation, professional paper, NSF grant, or other major research project. By the end of the academic year, students will be expected to formally present their proposals to their colleagues and members of their graduate committees.

In order to succeed in developing a viable research topic and preparing a sound proposal supported by the committee chair, students must communicate with their advisor/chair of their committees from the very beginning and at critical stages of the research planning process. If you do not yet have a research advisor, you must find one by the third week of class, as his/her input will be an important part of the work that is undertaken for this course.

### **Topics and Structure**

We will first look at the discipline of Geography and the array of interests and concerns of geographers. We will approach Geography as a highly diverse discipline and seek to identify the major trajectories of research within this dynamic, integrative, and synthetic field of study. This background is intended to help students find ‘their place’ in Geography and to identify areas of substantive interest. The success of this course depends on each student’s identification of an area of research and disciplinary focus.

We will have sessions to highlight the major sub-fields and theoretical engagements while also examining the nuances of academic inquiry, writing and scholarship. By November, you should be in a solid position to craft a prospectus to guide your research. This prospectus will help to support the development and structure of your full research plan (e.g., thesis or dissertation research or grant proposal). You will also be expected to give a presentation on your prospectus to the other students.

### **Learning Outcomes**

By the end of the course you will have the following capabilities:

1. Build the theoretical and conceptual foundation for preparing a solid research agenda.
2. Understand the general trajectories of research in contemporary geography and allied sciences, including the ability to frame scientific investigations in relation to the systematic branches of your sub-discipline.
3. Demonstrate skills in academic writing, research, and oral communication.
4. Engage with a learning community of graduate students and faculty by sharing ideas, exchanging theoretical and methodological insights with each other and supporting the research enterprise.

### **Course Policies**

#### **Class Attendance and On-time Appearance**

Attendance is required. Class attendance is essential to your success in the course. Excessive lateness disturbs everyone else – please appear on time.

#### **Open Door & One-on-one Discussions**

Please feel free to stop by during office hours or when my door is open to ask any questions you may have regarding the class. Please use this opportunity WHEN NEEDED.

#### **Accommodations**

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and [Disability Services for Students](#). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or call 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

#### **Academic Integrity**

“All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.” All students need to be familiar with the Student Conduct Code. The Code is available for review online at: [http://life.umt.edu/vpsa/student\\_conduct.php](http://life.umt.edu/vpsa/student_conduct.php).”

### **Readings**

Please make sure to read the assigned text(s) before class. This will aid in understanding the material that will be presented during the class period and in the formulation of any questions about the material that you may have. Assigned articles and book chapters will be available for download on Moodle. We will be drawing upon the following required texts:

Gaile, G.L., Willmott, C.J. (eds). 2005. *Geography in America at the Dawn of the 21<sup>st</sup> Century*. Oxford: Oxford University Press. [Available online [Geography in America at the Dawn of the 21st Century](#)]

Richardson, D. et al. 2017. *International Encyclopedia of Geography: People, the Earth, Environment and Technology*. New York: Wiley-Blackwell. [Available in the Mansfield Library]

Turabian, K.L. 2007. *A Manual for Writers of Term Papers, Theses, and Dissertations, 7<sup>th</sup> Edition*. Chicago: The University of Chicago Press.

Wulf, Andrea. 2015. *The Invention of Nature: Alexander von Humboldt's New World*. New York: Vintage Publishing.

### **Activities and Expectations**

#### **Class Discussion and Participation**

You are expected to attend class and to participate in class discussions. Some weeks will involve extensive class discussion while others will not; nevertheless, you are expected to do the assignments and reading and to be prepared to engage in a discussion every week. You should also be prepared to talk about the status of your progress, as we will use any additional time at the end of class for students to get feedback from each other. In addition, you are expected to give feedback and suggestions to other students on their disciplinary orientations and proposed research activities.

### Discussion of the Readings

You will lead one of our weekly discussions of assigned readings. As part of this activity, you will be assigning to the rest of the class an appropriate “Presidential Address” along with encyclopedia entries and/or review articles from key journals that summarize the state of research in your sub-field.

### Research Prospectus and Presentation

The primary written product of this semester will be a research prospectus that pertains to your topic and helps to conceptually frame your own avenue of inquiry. The prospectus (approximately 8-10 pages) should follow the format that we will be discussing in class. This assignment will include a reading list that draws together relevant works by geographers and researchers in allied disciplines. Early in the semester you need to agree on a research topic with your advisor and begin developing a reading list that is appropriate for your topic. There will be a large range in the specificity of students’ work at this stage in the research process. You will be expected to provide a 10 minute oral presentation of your project.

### Looking Ahead

- Late September: Meet with your advisor and discuss your research interests. Ask him/her how to best acquire a background in your intended field of study: He/she may recommend theses or dissertations that are related to your interests. Ask about relevant authors in your field of research, about important professional journals, and about seminal works (books, articles) that you should know (the “Must Reads” or MRs).
- Regularly (i.e., several times per week) develop the habit of reading articles from important professional journals in the field of Geography such as *The Professional Geographer*, *Annals of the Association of American Geographers*, *Geographical Review*, *Progress in Human Geography*, *Progress in Physical Geography*, *Journal of Cultural Geography*, *Geoforum*, *Economic Geography*, *Mountain Research and Development*, *Health & Place*, and/or those pointed out by your advisor.
- Attend at least one thesis defense during this academic year.

### Additional Information

- For assistance with writing, please consult the on-line resources of the UM Writing Center, Liberal Arts 144 [UM Writing Center](#)
- Please consult the Dean of Students’ website for the Student Conduct Code [Student Conduct Code](#).
- Use the website of the Graduate School to thoroughly familiarize yourself with relevant policies and procedures, <http://UM Graduate School>.
- Utilize the resources and information presented on the Department of Geography listserv.

Your grade in the course will be based on a series of assignments and activities as follows:

Work Evaluation and Final Grading		%
Weekly class discussion and participation		15%
Identification and assignment of readings		10%
Lead discussion of readings		15%
Prospectus and reading list		40%
Oral presentation of prospectus		20%

### Grading Scheme

93-100	A	87-89	B+	77-79	C+	67-69	D+	<60	F
		83-86	B	73-76	C	63-66	D		
90-92	A-	80-82	B-	70-72	C-	60-62	D-		

Late assignments will be penalized. An assignment that is turned in one day late will have 10% of the available points deducted from the score. An assignment that is turned in two days late will have 20% of the available points deducted from the score. No credit will be awarded for assignments that are more than two days late. "Day" denotes a business day (Monday through Friday) not the time interval between class meetings. For example, an assignment that is due on Thursday but turned in on Monday will be counted two days late.

## Schedule of Meetings

<b>August 29</b>	<b>Geographical Inquiry and the Graduate Research Experience</b>
Topic:	An introduction to our semester plan and details of the course organization.
Reading:	Skim chapters that align with your research interests: <i>International Encyclopedia of Geography</i> [Mansfield Library] <i>Geography in America at the Dawn of the 21<sup>st</sup> Century</i> . Oxford: Oxford University Press. [Available online]
<b>September 5</b>	<b>Contemporary Research in Geography: A Broad Overview</b>
Topic:	An initial discussion of the major research trajectories in the discipline, including attention to the range of theoretical and methodological approaches that are employed.
Readings:	Introductory Chapter(s) of <i>International Encyclopedia of Geography</i> [Mansfield Library] Holt-Jensen, A. 2009. <i>Geography. History and Concepts: A Student's Guide, 4<sup>th</sup> Edition</i> . Los Angeles: Sage. [Chapter 1 on Moodle].
Assignment:	Identify at least three major areas that conceptually and theoretically 'map' onto your interests, academic and professional goals, methodological approach, and research topic. Come to class prepared to discuss types of research questions and theoretical orientations of your sub-field of interest.
<b>September 12</b>	<b>The Literature Review</b>
Topic:	What is a literature review? How and where to begin?
Reading:	Turabian, K.L. 2007. <i>A Manual for Writers of Term Papers, Theses, and Dissertations, 7<sup>th</sup> Edition</i> . Chicago: The University of Chicago Press. Articles and chapters on Moodle
Assignment:	Develop a first outline and conceptual map of the substantive bodies of literature within geography to share during our class meeting.
<b>September 19</b>	<b>Resources for Geographical Research I</b>
Topic:	Research tools and resources available through the Mansfield Library and effective bibliographic search strategies.
Reading:	Turabian, K.L. 2007. <i>A Manual for Writers of Term Papers, Theses, and Dissertations, 7<sup>th</sup> Edition</i> . Chicago: The University of Chicago Press (Chapters 9 and 10).
Assignment:	Begin reviewing the selection of theses and dissertations that have been undertaken on your topic at UM and beyond in the past 10-20 years. Bring observations (approximately 3-4 observations) about their strengths and weaknesses to share during our next session.
<b>September 26</b>	<b>Resources for Geographical Research II</b>
Topics:	Structuring the process of compiling and reviewing the literature.
Readings:	Aim for the first half of Andrea Wulf's <i>The Invention of Nature</i>
Assignment:	Begin visiting with your faculty mentors about the "must reads" in your sub-field and continue seeking examples of exemplary theses and dissertations. Begin building your own bibliographic database of relevant literature. Come prepared to discuss the first half of <i>The Invention of Nature</i> .
<b>October 3</b>	<b>Contemporary Research in Geography I: Mountain Geography ~ No Class ~ Thinking Mountains Conference in Banff, Canada</b>
Topics:	Defining and refining research problems and questions in mountain geography.
Reading:	Byers, A.C., Price, L.W., Price, M.F. 2013. Introduction to Mountains. In: Price, M.F.,

	<p>Byers, A.C., Friend, D.A., Kohler, T., Price, L.W. (eds.), <i>Mountain Geography: Physical and Human Dimensions</i>. Berkeley: University of California Press, 1-10.</p> <p>Friend, D.A. 2002. Mountain Geography in 2002: The International Year of Mountains. <i>The Geographical Review</i>, 92, iii-vi.</p> <p>Marston, R.A. 2008. Land, life, and environmental change in mountains. <i>Annals of the Association of American Geographers</i>, 98, 507-520.</p> <p>Peattie, R. 1936. Introduction. In: Peattie, R., <i>Mountain Geography - A Critique and Field Study</i>. New York: Greenwood Press, 3-8.</p> <p>Price, L.W. et al. 1981. What is a mountain? In: Price, L.W., <i>Mountains and Man: A Study of Process and Environment</i>. Berkeley: University of California Press, 1-5.</p>
Assignment:	Be prepared to address these questions: (1) what are the research problems and questions addressed in this field of study? (2) why are these research questions significant in the discipline of geography? And (3) what are the broader impacts for geography, science, and society?
<b>October 10</b>	<b>Contemporary Research in Geography II: Physical Geography</b>
Topics:	Defining and refining research problems and questions within physical geography.
Reading:	TBA
Assignment:	Be prepared to address these questions: (1) what are the research problems and questions addressed in this field of study? (2) why are these research questions significant to building knowledge and understanding of physical geography? And (3) what are the broader impacts for geography, science, and society?
Presenter:	
<b>October 17</b>	<b>Contemporary Research in Geography III: Human Geography</b>
Topics:	Defining and refining research problems and questions within the realm of human geography.
Reading:	TBA
Assignment:	Be prepared to address these questions: (1) what are the research problems and questions addressed in this field of study? (2) why are these research questions significant to building knowledge and understanding of human geography? And (3) what are the broader impacts for geography, science, and society?
Presenter:	
<b>October 24</b>	<b>Contemporary Research in Geography IV: Environment-Society Tradition</b>
Topic:	Defining and refining research problems and questions within the environment-society tradition.
Reading:	TBA
Assignment:	Be prepared to address these questions: (1) what are the research problems and questions addressed in this field of study? (2) why are these research questions significant to building knowledge and understanding of human-environment dynamics? And (3) what are the broader impacts for geography, science, and society?
Presenter:	
<b>October 31</b>	<b>Contemporary Research in Geography V: Cartography &amp; GIScience</b>
Topics:	Defining and refining research problems and questions within the fields of cartography and GISciences.

Reading:	TBA
Assignment:	Be prepared to address these questions: (1) what are the research problems and questions addressed in this field of study? (2) why are these research questions significant to building knowledge and understanding in our discipline? And (3) what are the broader impacts for geography, science, and society?
Presenter:	
<b>November 7</b>	<b>Synthesis of Your Research Trajectory in the Geographical Sciences</b>
Topic:	Strategies for defining and refining your research problem and questions.
Reading:	Examples of graduate student research prospecti and full proposals
Assignment:	The first draft of your research prospectus is <b>due</b> .
<b>November 14</b>	<b>Synthesis of Future Trajectories in the Geographical Sciences</b>
Topics:	Looking back and ahead
Reading:	Finish Wulf's <i>The Invention of Nature</i>
Assignment:	Be prepared to discuss the reading
<b>November 21</b>	<b>Thanksgiving ~ No Class Meeting</b>
<b>November 28</b>	<b>Project Presentations</b>
Presenters:	
<b>December 5</b>	<b>Project Presentations</b>
Presenters:	
<b>Finals Week</b>	<b>Final meeting</b>
Topic:	The final meeting has two objectives: 1) to review your progress to date; and 2) for you to present your short- and long-term research goals.
Assignment:	Final draft of your research prospectus is <b>due</b> .