

**GCU585 ADVANCED RESEARCH METHODS IN GEOGRAPHY**  
**Spring, 2006**  
**Schedule Line Number 04673**  
**Class: 1:40 - 4:30 Wednesdays, Room SCOB 335**

**Instructors**

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**Course Goals**

**GCU585** prepares students to undertake creative geographic research culminating in the generation of new knowledge, and serves as a foundation for the student in achieving the objective of a productive and successful degree. It is the foundation upon which students pursue an active and productive graduate program, either at the masters or doctoral level. In contrast to GCU529, which emphasizes geographic thought, **GCU585** stresses methods, ethical practice, and the generation of an original research proposal. Specific learning objectives are:

- to produce a vita, area of specialization statement, literature review, problem statement, and final proposal
- to develop the skills needed to conceive and plan a research project
- to communicate geographic ideas effectively in written and oral form
- to evaluate the strengths and weaknesses of research methods
- to develop informed opinions about the important intellectual and methodological debates in geography
- to engage in ethical research practices

**Grading**

Because **GCU585** is a graduate course and a critical component of the graduate program in geography at ASU, the expectations are high. Students who adequately complete all assigned work and contribute regularly to discussions in class should expect a grade of B for the course. Students who do not participate regularly in class discussion or turn in work that is late, poorly done, or inconsistent with course standards will receive a grade of C or lower. The grade of A is reserved for those who those who *consistently* produce excellent work and contribute regularly and meaningfully to class discussions. There are no incomplete grades except under very unusual circumstances fully justified according to University guidelines. Grades will be calculated based on the following breakdown (in percent of course total):

Editing Exercise	2.5
Vita	5
Written Area of Specialization Statement	5
Area of Specialization Presentation	2.5
Area of Specialization Critique	2.5
Summary of Two Articles	2.5
List of 5 Research Questions from Articles	2.5
Literature Review	12.5
Problem Statement Presentation	2.5
Written Problem Statement	10
5 Model Summaries	2.5
Research Methods Presentation	2.5
Class discussion	5
Written Proposal	25
Oral Proposal	12.5
Proposal Critique	5

**Course Total**

100%

**Class Resources**

Association of American Geographers. Style Sheet for The Annals of the Association of American Geographers: <http://www.aag.org/Publications/Annals/Annals%20Style%20Sheet%2040105.pdf>.

National Science Foundation. Grant Proposal Guide: [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=pgg](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=pgg).

Strunk, William Jr. and E. B. White. 2000. *The Elements of Style*. 4<sup>th</sup> ed. New York: Longman Publishers.

Thomson Corporation. ISI Web of Knowledge: <http://isi10.isiknowledge.com/portal.cgi>.

Trochim, William M. The Research Methods Knowledge Base, 2nd Edition. Internet WWW page, at URL: <http://www.socialresearchmethods.net/kb/index.htm> (version current as of August 16, 2004). A hard copy of this may be purchased on-line.

University of Chicago Press. The Chicago Manual of Style—Examples of Chicago-Style Documentation: <http://www.press.uchicago.edu/Misc/Chicago/cmosfaq/tools.html>.

**Optional Readings**

Here are some readings that were required in past semesters in GCU 585, but in keeping with our hands-on, student-centered approach, they are not required. They are listed here as optional references.

Brunn, S. D. 1988. The manuscript review process and advice to prospective authors. *Professional Geographer* 40:8-14.

Cohen, M.R. and Nagle, E.. 1934. *An Introduction to Logic and Scientific Method*. New York: Harcourt Brace. Chapters 10, 11, 20

de Souza, A. R. 1988. Writing matters. *Professional Geographer* 40:1-3.

Gaile, G. L., and Willmott, C. J. 1989. *Geography in America*. London: Merrill Publishing Co., p. xxiv-xliv.

Haggett, P. and R. Chorley. 1967. Models, Paradigms, and the New Geography. In *Physical and Information Models in Geography*, ed. by P. Haggett and R. Chorley. London: Methuen, p. 19-41 (read p. 19-26 only)

Hansen, W. R. 1991. *Suggestions to Authors of the Reports of the United States Geological Survey*. Washington, D.C.: U.S. Government Printing Office, p. 4-18.

Hanson, S. 1988. Soaring. *Professional Geographer* 40:4-7.

Hart, J. F. 1976. Ruminations of a dyspeptic ex-editor. *Professional Geographer* 28:225-232.

Hart, J. F. 1982. The highest form of the geographer's art. *Annals of the Association of American Geographers* 72:1-29.

Harvey, D. 1969. *Explanation in Geography*. New York: St. Martin's Press, Ch. 4 (p. 30-43), Ch. 10 (p. 141-161).

Pattison, W. 1964. The Four Traditions of Geography. *Journal of Geography* 63: 211-216.

Sayer, A. 1992. *Method in Social Science: A Realist Approach*. London: Routledge. Chapters 1, 9.

Schaefer, F. K. 1953. Exceptionalism in geography: A methodological examination. *Annals of the Association of American Geographers* 43:226-249.

Schuchert, C., Lawson, A.C., and Ries, H. 1931. A fourth letter of advice on the presentation of papers and on the preparation of abstracts. Reproduced by the Geological Society of America.

Stoddart, D. R. 1986. *On Geography*. Oxford: Basil Blackwell, p. 1-27.

Taaffe, E. 1974. The spatial view in context. *Annals of the Association of American Geographers* 64: 1-16

Thomas, R. W. and Huggett, R. J. 1980. *Modelling in Geography: A Mathematical Approach*. Totowa, NJ: Barnes and Noble Books, p. 3-10.

Turner, B. L. II. 1988. Whether to publish in geography journals. *Professional Geographer* 40:15-18.

Wilmott, C. and Gaile, G. 1992. Modeling. In *Geography'120s Inner Worlds*, ed. By R.F. Abler, M.G. Marcus, and J. M. Olson. New Brunswick, NJ: Rutgers University Press, p. 163-186.

Other readings and resources may be made available during the semester.

<b>WEEK</b>	<b>TOPIC</b>	<b>DISCUSSION QUESTIONS</b>	<b>IN-CLASS ACCOMPLISHMENT</b>	<b>ASSIGNMENT</b>	<b>DUE</b>
<b>Week 1 January 18</b>	Introductions, Goals, Advisors, MA vs. PhD, Handbook, Vitae, and Writing	- What is the difference between Masters and PhD degrees? - What goes into a vita and what doesn't? - How too rite gooder?	- Create a list of dos and don'ts for vitae - Create a list of dos and don'ts for good writing	- Create a vita (due in 1 week) - Edit and critique a writing sample (due in 1 week)	
<b>Week 2 January 25</b>	Area of Specialization Statements 1 and Presentations	- What goes into a good AOS? - What makes a good oral presentation?	- Create a list of dos and don'ts for AOSs - Create a list of dos and don'ts for oral presentations	- Write your AOS and prepare an AOS presentation (due in 1 week) - Review the literature reviews of several articles in your area (due in 1 week)	- Vita - Edited writing sample
<b>Week 3 February 1</b>	AOS 2 Literature Review 1 (Structure)	- What goes into a good literature review? - How to structure a literature review?	- Present your AOS - Critique someone else's AOS - Create a list of types of lit reviews (with pros & cons)	- Locate & summarize 2 key articles on your research topic (due in 1 week) - Write a critique of another student's AOS (due in 1 week)	- Written AOS (2 copies)
<b>Week 4 February 8</b>	Literature Review 2 (Mechanics)	- How to find sources? - Why are good sources important?	- Learn how to use Web-of-Science and other web-based resources - Library scavenger hunt - Learn how to use ENDNOTE	- Begin writing a complete literature review for your topic (due in 2 weeks) - Find the exact research question in 5 articles on your topic (due in 1 week)	- AOS critique - 2 article summaries
<b>Week 5 February 15</b>	Research Problem 1	- What makes a good research problem?	- Develop research question ability (rolling-a-research-question exercise)	- Begin writing a problem statement and preparing a presentation (due in 2 weeks) - Create a list of research methods in your field (due in 1 week)	- Research questions from 5 articles
<b>Week 6 February 22</b>	Methods 1 (Survey of Methods)	What types of methods exist? What are their pros & cons?	- List as many research methods as possible (plus pros & cons) - Discuss how to write a Problem Statement	- Edit a fellow student's problem statement and have them edit yours (problem statements due in 1 week, no need to hand in your edits)	- Literature review
<b>Week 7 March 1</b>	Research Problem 2		- Present your problem statement - Questions and critiques		- Problem statement
<b>March 8</b>	<b>AAG MEETING IN CHICAGO</b>	<b>NO CLASS</b>	<b>NO CLASS</b>		
<b>Week 8 March 15</b>	<b>SPRING BREAK</b>	<b>NO CLASS</b>	<b>NO CLASS</b>		

<b>WEEK</b>	<b>TOPIC</b>	<b>DISCUSSION QUESTIONS</b>	<b>IN-CLASS ACCOMPLISHMENT</b>	<b>ASSIGNMENT</b>	<b>DUE</b>
<b>Week 9 March 22</b>	Research Proposals	<ul style="list-style-type: none"> <li>- What goes into a good research proposal?</li> <li>- How to structure a research proposal?</li> </ul>	<ul style="list-style-type: none"> <li>- Develop an outline for a complete research proposal</li> <li>- Develop a group mini-proposal</li> </ul>	<ul style="list-style-type: none"> <li>- Begin creating a complete research proposal consisting of a 15-minute presentation and a 15-page paper (due in 7 weeks)</li> <li>- Finish group mini-proposal</li> </ul>	
<b>Week 10 March 29</b>	Methods 2 (Models)	<ul style="list-style-type: none"> <li>- What is a model?</li> <li>- Why build models?</li> <li>- How to build a model?</li> </ul>	<ul style="list-style-type: none"> <li>- Review mini-proposals</li> <li>- Discuss NSF proposal criteria and reviewer criteria</li> <li>- Explore models</li> </ul>	<ul style="list-style-type: none"> <li>- For 5 articles in your literature review, summarize the model used, and choose 5 words to describe each model</li> </ul>	- Group mini-proposal
<b>Week 11 April 5</b>	Methods 3 (Models, cont'd.) (Nuts and Bolts)	<ul style="list-style-type: none"> <li>- What kinds of models do geographers use?</li> <li>- How specific should I be about my method?</li> <li>- How do sampling and statistics fit into the research process?</li> </ul>	<ul style="list-style-type: none"> <li>- Develop terminology for characterizing models</li> <li>- Categorize models along several dimensions</li> <li>- Review sampling and statistics</li> </ul>	Create a research methods presentation (due in 2 weeks)	- 5 model summaries
<b>Week 12 April 12</b>	Methods 4 (Nuts and Bolts, cont'd.) Grants and Budgets	<ul style="list-style-type: none"> <li>- Do geographers still need maps?</li> <li>- What are the nuts and bolts of methods other than statistics?</li> <li>- Why are grants important?</li> <li>- How to get grants?</li> <li>- What goes into a budget? (and what doesn't)</li> <li>- What goes into a time schedule (what doesn't)</li> <li>- What are the benefits of grants vs. contracts?</li> <li>- What are the ways in which research can be invalid?</li> </ul>	<ul style="list-style-type: none"> <li>- Discuss maps and other models</li> <li>- Create a list of grant-writing dos and don'ts</li> <li>- Introduce 4 research validity concepts from <i>Research Methods Knowledge Base</i></li> </ul>	(Continue working on research methods presentation (due in 1 week))	
<b>WEEK</b>	<b>TOPIC</b>	<b>DISCUSSION QUESTIONS</b>	<b>IN-CLASS ACCOMPLISHMENT</b>	<b>ASSIGNMENT</b>	<b>DUE</b>

<b>Week 13 April 19</b>	Methods 5 (Validity)	- How valid are the methods proposed by GCU 585 students?	- Present your research methods - Apply the 4 validity concepts to student research methods	- Read 2 articles and be prepared to critique them orally (due in 1 week) - Ask your advisor about a tricky ethical situation they encountered	
<b>Week 14 April 26</b>	Articles, Ethics, and How to Play the Game	- How do articles get published? - Is it ethical to... ?	- Discuss the journal-article process - Evaluate quality of assigned articles - Discuss scientific ethics - Decide what to do in tricky situations		- Nothing to hand in, but bring notes on 2 articles and ethical situation
<b>Week 15 May 3 ALL DAY!</b>	Presentations and Party (including lunch and dinner) <b>(Location TBD)</b>		- Present research proposals - Provide constructive critiques for presenters		- Final proposals (3 copies)
<b>Monday, May 8 5 PM</b>					- Critique of fellow student's proposal and presentation