



SSCI 594a – Masters Project Preparation (Section 35776D) Course Syllabus – Summer 2014

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I am generally most available via email. Also, available to schedule for chats via phone or we can meet in my Adobe Connect room. Just get in touch!

Course Scope and Purpose

This course and its successor, SSCI 594b, are required for the Master of Science degree program; they are not applicable to the GIST Graduate Certificate program. The purpose of these courses is to accomplish a project demonstrating ability (PDA) in the Spatial Sciences, culminating the student's experience at USC/SSI and validating them as a master practitioner. The PDA can be a traditional thesis, a cartographic portfolio, a GIS programming implementation (e.g. web GIS, mobile GIS), or some other sizable, professional study based in the spatial sciences or their application to another field. Although the content varies widely depending on the subject, all PDA's culminate in a thesis manuscript that is available at the USC Libraries and on the Spatial Sciences Institute (SSI) website

In SSCI 594a, the principal objective is to revise and expand the topic prospectus you produced in SSCI 587 such that it is a true **thesis proposal**. The thesis proposal must then be defended for a panel of SSI faculty and/or SSI faculty affiliates. Along the way to this defense, there are two juries that students must pass. Following the proposal defense, upon the recommendation of the faculty panel, the SSI Director assigns a committee of three faculty members (one Chair and two members) to oversee the PDA and evaluate the thesis manuscript.

The course interweaves the following components throughout the semester:

Reading and Writing – We will read in their entirety Strunk & White's *The Elements of Style* along with Turabian et al.'s *A Manual for Writers*, along with texts of varying lengths and styles, including encyclopedia entries, journal articles, book chapters, and also completed theses from our program. We will discuss the strengths and weaknesses of these texts in online discussions, small group (2-3 person) teleconference sessions, using Adobe Connect and/or Skype.

Research Methods – We will read sections from Montello & Sutton's *An Introduction to Scientific Research Methods in Geography & Environmental Studies* and attend guest lectures (recorded) from experts on such topics as human subjects research, test instrument design, computer equipment (hardware and software) utilization, and the all-important literature review.

Technical Tools – We will learn/brush-up on modern technical tools for publication, including particularly the MS Office suite (Word, Excel, and PowerPoint), and its interfaces with add-ins for bibliographies, equations, and illustrations, including automated citation tracking



tools. We will also become aware of the details of the required document format and citation style for GIST thesis manuscripts.

Professional Networking – We will network as a group with USC faculty, both within and beyond the Spatial Sciences Institute, as well as potential project reviewers and sponsors outside the University. By engaging with these people and working one-on-one with the faculty of record for this course, each student is expected and, where necessary coached, to discover/refine their PDA topic and recruit a committee of supporters for it.

Master's Thesis Proposal – We will utilize your preparation in both the required and elective courses in the program to help you to turn your topic prospectus into a master's thesis proposal. The “final” in this course is a well-reasoned, well-written *master's thesis proposal* and accompanying *slide deck* and *abstract*. This constitutes essentially a complete draft of the first three chapters of your thesis manuscript. It must present a complete and viable plan for finishing the thesis within 3-6 months.

Absent a successfully defended thesis proposal, slide deck, and abstract, a thesis committee may fail to be recruited. Without appointment of a thesis committee during SSCI 594a, the successor SSCI 594b *must* be used to establish those prerequisites before proceeding with the PDA itself. **In such a case, additional semesters (i.e. SSCI594z) would most likely be required to complete the PDA, delaying the ultimate goal of obtaining the master's degree.**

Learning Outcomes

When you have completed this course, you will be able to:

- Distinguish different styles and qualities of writing, critically evaluate your own and others' writing, and write better yourself;
- Understand the research process, be aware of research obligations and pitfalls, and design a credible, meaningful research project for yourself;
- Utilize the Microsoft Office™ software suite competently and efficiently to produce documents that meet GIST program requirements and show your work to advantage; and
- Describe your proposed Masters PDA succinctly, in written and oral forms, to faculty, mentors, and potential sponsors.

Course Formats

This is a graduate level course, so you should expect it to be both academically robust and intellectually challenging. As a graduate student you are expected to engage with the subject matter and to critically assess the ideas, opinions, and techniques presented in the readings and exercises. My role as instructor is that of a guide to help keep you and your fellow students on the path of discovery. The challenge for all of us is to replicate such an academic experience within the milieu of “online learning”.

All course materials will be organized through Blackboard. A peer review component of the course will be organized through DropBox. Further details on the use of DropBox will be provided during the course. The main theoretical concepts will be provided through course notes and assigned readings. The editing and writing exercises are designed to bring you face-to-face with practical problems. All software products required will be accessible over the Internet.

The pedagogical technologies that facilitate our coursework and interactions include:



Blackboard (Bb) – If you are registered for this course, it will automatically show up on Blackboard, in your list of available classes no later than 12:00 noon PT on the first day of classes. Subsequently, all learning materials, including formal correspondence and assignments from me will be posted on Blackboard. You should submit your work products back to me via Blackboard, too.

Discussion boards – Also, we will use Blackboard to host informal discussion boards relevant to various aspects of the course, particularly the exercises; these are other forums for “working together”, sharing hints and help as in a traditional classroom setting. These threads are mainly meant as a forum for student-to-student discussion. I will not be monitoring these threads regularly, so please use email to reach me if you have a question that needs an immediate answer.

Live meetings, recorded meetings, & presentations – Adobe Connect is a browser-based service that facilitates synchronous, interactive sessions with voice/video and shared desktop capabilities between two or more people; this is the primary forum for our group discussions and presentations. There are also recorded research presentations from USC SSI and SSI-affiliated faculty available on Adobe Connect.

Telecommunications – Mobile or landline phones, usually supplemented with video and shared desktop via Adobe Connect, or Skype (if necessary), are the preferred technologies for individual chats with me.

GIST server and tech support – Unlike other courses in the GIST program, students in this course will utilize the SSI GIST Server, which is a virtual desktop, only for independent thesis work (e.g. to explore datasets and perform initial analysis). Even then, relative to other courses in the program, work on ArcGIS on the server is not expected to be a major component of activity in this course. You can access the GIST Server at: <https://gistonline.usc.edu/>. If you are unable to connect to the server or experience any type of technical issues, send an email to GIST Tech Support at gistsupport@dornsife.usc.edu and make sure to copy (cc) me on the email. GIST Tech Support is available Monday through Friday, 9:00 a.m.-5:00 p.m. PT. Please be sure to be specific with respect the problem you are experiencing as whatever work is required on will be unique to each thesis project.

Assessment

An In-Progress (IP) grade is automatically assigned for SSCI 594a; this converts to Passing (P) when SSCI 594b (and if necessary SSCI 594z) is/are completed. Nonetheless, student work in SSCI 594a **is graded** according to rubrics provided with each assignment. Students should utilize this adherence to standard grading protocols as a signal, throughout the semester, as to whether they are “on track” towards successful completion of the thesis. As this is a graduate level course, grades lower than a B indicate failure to stay on track.

The graded assignments in the course are as follows:

Resume Assignment – 1 for a total of 2 pts. We require all current students to post and maintain a public resume, short biography and recent photo on our shared GIST Student Community Blackboard site. With your permission, your photo and resume will be posted to the Spatial Sciences Institute website and your resume will be included in the GIST Resume Book. The latter is compiled annually and along with our web presence used to promote our programs and more importantly, your skills, experience, and professional aspirations.



Student introductions – 1 for a total of 2 pts. Each student provides a brief introduction of his or her background and professional aspirations. Students also provide a summary of their coursework to date, and a reflection on their topic prospectus following on their additional coursework and professional experience (if any) after SSCI 587.

Class thesis discussion – 1 for a total of 4 pts. At the start of the course, one previously completed thesis is identified on the SSI website for the entire class to discuss on the Bb discussion forum. The discussion is structured by a number of questions set as the start of several threads. Students are required to make a minimum of one initial post to each thread and one post responding to comments from other students.

Written Précis – 1 for a total of 6 pts. As practice and demonstration of the skills of professional writing discussed in the course, students are required to write one short précis of a research article identified by the instructor

Short Summaries – 1 for a total of 6 pts. Students are required to read one previously completed GIST thesis. The precise choice of thesis is at the option of the student, and should be chosen as appropriate learning for the student's interest and proposed thesis project. Students provide a short summary according to questions provided by the instructor.

Peer Review of Topic Prospectus – 1 for a total of 10 pts. Students work in teams to review the topic prospectus produced in SSCI 587 according to a rubric provided by the instructor. Students will turn in both a review summary to the instructor on Bb as well as a version utilizing track changes to the peer review DropBox. If they have not done so already, students are welcome to revise their topic prospectus prior to the peer review exercise according to feedback from their SSCI 587 instructor or based on information or direction obtained in later coursework.

Project Research Design/Methods Outline (Draft and Revised) – 1 for total of 10 pts. Students produce an outline of the project research design according to a detailed assignment provided by the instructor. As appropriate to the type of PDA proposed, this includes clearly stated research questions, programming objectives, or mapmaking objectives. Both draft and revised versions are turned in on the same Bb upload link. Revision according to the instructor's feedback may result in an improved grade.

Research Question Jury (Jury #1) – Graded Pass or Fail. The instructor submits the student's revised research design outline with clearly articulated research questions and/or programming objectives to identified faculty members. A passing mark indicates that in the opinion of the faculty the students have research questions or programming objectives that are viable to answer within their skill set and the timeframe allotted to the thesis. Students must secure a passing mark to reach the proposal defense.

Report on Data Exploration – 1 for a total of 10 pts. Students confirm the availability and quality of data needed to complete the proposed PDA. As appropriate to the type of PDA proposed, this task may include importing datasets to ArcGIS or other software and completing initial analysis, programming activities, and/or defining fieldwork procedures (if



required). Students produce a short report according to an assignment provided by the instructor.

Data Feasibility Jury (Jury #2) – Grade Pass or Fail. The instructor submits the student's report on data exploration to identified faculty members. A passing mark indicates that in the opinion of the faculty the student has identified that data of the type and quality needed to implement the research design are available.

Topic Proposal Reading Assignment – 2 for a total of 10 pts. In the first assignment, students propose research articles or books in support of their proposed research design/methods. In the second assignment, students turn in notes that paraphrase/summarize these articles for incorporation in their methods chapter.

Methods Chapter (Draft and Revised) – 1 for a total of 10 pts. Working from their outlines, reports on data exploration, and topic proposal reading assignments, students produce a Methods Chapter (Chapter 3 of the thesis manuscript). Both draft and revised versions are turned in on the same Bb upload link. Revision according to the instructor's feedback may result in an improved grade.

Related Work Chapter (Draft and Revised) – 1 for a total of 10 pts. Working from instructor and peer feedback on their topic prospectus, students produce a Related Work Chapter (Chapter 2 of the thesis manuscript). Both draft and revised versions are turned in on the same Bb upload link. Revision according to the instructor's feedback may result in an improved grade.

Introduction Chapter (Draft and Revised) – 1 for a total of 10 pts. Working from instructor and peer feedback on their topic prospectus, students produce an Introduction Chapter (Chapter 1 of the thesis manuscript). Both draft and revised versions are turned in on the same Bb upload link. Revision according to the instructor's feedback may result in an improved grade.

Slide Presentation (Draft and Revised) – 1 for a total of 10 pts. Students create a slide presentation to visually and orally communicate their thesis proposal. Both draft and revised versions are turned in on the same Bb upload link. Revision according to the instructor's feedback may result in an improved grade.

Abstract (Draft and Revised) – 1 for a total of 10 pts. A clear abstract is absolutely critical to communicating the student's intention in the thesis proposal to the entire USC SSI and SSI-affiliated faculty. Both draft and revised versions are turned in on the same Bb upload link. Revision according to the instructor's feedback may result in an improved grade.

Careful planning and a serious, consistent commitment will be required for you to successfully navigate the various deliverables in this as in other GIST courses. The table at the top of the next page summarizes the SSCI 594a course assignments and their point distribution.



Assignments	Number	Points Per Assignment	Total Points
Resume Assignment	1	2	2
Student Introduction	1	2	2
Class Thesis Discussion	1	4	4
Written Précis	1	6	6
Short Summaries	2	3	6
Peer Review of Topic Prospectus	1	10	10
Project Research Design/Methods Outline	1	10	10
Report on Data Exploration	1	10	10
Topic Proposal Reading Assignment	2	5	10
Methods Chapter	1	10	10
Related Work Chapter	1	10	10
Introduction Chapter	1	10	10
Slide Presentation	1	5	5
Abstract	1	5	5
Totals	16	-	100

Grades in this and other GIST courses use the standard USC grading criteria, as follows:

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

And finally, it is important to note from the outset that: (1) late postings and assignments will be docked one grade and no grade will be given for postings or assignments turned in more than one week late; and (2) if the three chapters constituting the thesis proposal, the abstract, and slide presentation are not delivered by 5:00 p.m. on the last day of classes (i.e. 15th August 2014) for the faculty review committee, the student may not obtain a committee, likely resulting in additional semesters of thesis work and delaying and/or failing graduation with an M.S. degree.

Requirements

Textbooks – The following three textbooks are **required** for this class; these are available from the USC Bookstore or online outlets such as Amazon. Please purchase these quickly because reading assignments from these are required in Week 2 of the course.

1. Strunk, W. and E.B. White. 2000. *The elements of style*. 4th ed. Needham Heights, MA: Allyn and Bacon. (~\$7 paper; ISBN-10: 0205313426; Referred to as “S&W” below)
2. Turabian K.L., W.C. Booth, G.G. Colomb, and J.M. Williams. *A manual for writers of research papers, theses, and dissertations*. 8th ed. Chicago, IL: University of Chicago Press. (~\$10 paper; ISBN-13: 978-0-226-81638; Referred to as “T.” below)



3. Montello, D.R. and P.C. Sutton 2013. *An introduction to scientific research methods in geography and environmental studies*. 2nd ed. Los Angeles, CA: Sage. (~\$39 paper; ISBN-10: 1412902878; Referred to as “M&S” below)

Readings – The above materials will be supplemented with readings from the following books and academic journals, all will be posted on Blackboard under the Readings tab:

- Montello, D.R. 2001. Scale in geography. In *International encyclopedia of the social and behavioral sciences*, ed. N.J. Smelser and P.B. Baltes, 13501-13504. Oxford, UK: Pergamon Press.

Technology – There are several technology requirements:

- Every student must have a computer with a fast Internet connection (DSL at a minimum).
- Every student **MUST** have a functional webcam for use whenever a presentation or meeting is scheduled.

Communications – This is a distance-learning course, but in a departure from other courses in the GIST program, many of our interactions, listed below as “tutorials,” will be synchronous (at the same time). However, all assignments given and all materials to be handed in will still be handled via Blackboard. I will also create and monitor Blackboard discussion forums through which we can discuss issues, assignments, and exercises as needed.

Please be sure that you read as soon as possible all email sent from Blackboard or from me. Also, if you do not regularly use your USC email account, please double check to be sure that mail sent from both the USC blackboard accounts and my USC account (vos@usc.edu) to your USC account is forwarded to an address you use regularly and does not go into your junk mail!

While I am usually online and will probably respond to emails from students relatively quickly, I generally endeavor to respond to all email within 24 hours of receipt, aiming for no more than 48 hours delay. In the rare case when I expect to be offline for more than 72 hours, I will post an announcement on the Blackboard site.

Particularly because of the asynchronous nature of this course, it is each student's responsibility to stay informed and connected with others in our course. In addition to email, you are expected to login to Blackboard regularly to check for Announcements there.

Workload – This is a two credit, one semester course. Frankly, however, as you will aim to accomplish essentially half of your thesis work in this semester you should plan for a greater workload in the upcoming 15 weeks than would normally correspond to a 2-unit course. Students should expect to spend an average of 10-15 hours per week and an average of 1-2 hours per week in Adobe Connect sessions in weeks where tutorials are listed. I will schedule several different times to help fit into your weekday, evening, and weekend availability.

Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to an instructor as early in the semester as possible. DSP is located in STU 301 and is open from 8:30 a.m. to 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.



Statement on Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. Scampus, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: http://web-app.usc.edu/scampus/wp-content/uploads/2009/08/appendix_a.pdf. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>.

Important Administrative Dates

- 5/21: Summer semester classes begin
- 5/26: Memorial Day, university holiday
- 6/4: Last day to drop a class without a mark of "W" and receive a 100% refund (no partial refund after this date), and last day to register and add classes
- 6/24: Deadline to submit signed Approval to Submit form to the Graduate School
- 7/4-5: Independence Day, university holiday
- 7/29: Last day to drop a class with a mark of W
- 8/15: Summer semester classes end

The next page provides the schedule for our course. Some details are subject to change, but the assignment deadlines listed may be considered fixed. Note: **All assignments are due by 11:59 p.m. PT on the Sunday at the end of the week in which they are listed on the syllabus.**



Tentative Schedule (35575D)

Week #	Week Begins	Theme	Readings		Tutorials	Assignments due Sunday
			Text	Other		
1	21-May	Introduction to research	M&S Ch.1 & 2	Oulton (thesis) (2012) & Montello (2001)		Resume; Self-Intro; Oulton Bb Discussion
2	27-May	Guidelines for writing well	S&W all T. Ch. 1 & 2		Tutorial 1: MS-Office Tools Discuss Montello and S&W	Précis & Prospectus Peer Review
3	2-Jun	Thinking about the research process	M&S Ch. 3			Draft Outline of Research Design/Methods
4	9-Jun	Getting started with research	M&S Ch. 4-9		Tutorial 2: Discussion	Jury # 1 Submission
5	16-Jun	Data Exploration & Analysis	M&S Ch.10-11			Jury #1 Result & Revised Outline
6	23-Jun	Faculty research themes and styles		On-line Videos (<i>Optional</i>)		Proposal Reading Assignment
7	30-Jun	Presenting a topic, How to write a good report	T. 4-8	Thesis 1 Review		Short Summary #1 and Report on Data Exploration
8	7-Jul	References, citations and formatting	T. Ch.15 & 18-19	GIST Thesis Template & Guidelines	Tutorial 3: GIST Citation Style & Tools, Discussion	Jury #2 Submission
9	14-Jul	Work on Methods Chapter				Jury #2 Result & Draft Methods Chapter
11	28-Jul	Work on writing				Draft Related Work Chapter, Draft Introduction Chapter, and Draft Abstract
12	4-Aug	Work on writing				Revised Methods Chapter and Draft Slide Presentation
13	11-Aug	Proposal Defense			Student Presentations to SSI Faculty Committee	Complete Thesis Proposal Defense Draft (i.e., revised all chapters)
14	15-Aug	Ethics in research	M&S Ch. 14		Submission to SSI Director/ Appointment of Committee	Final Revision of Thesis Proposal