SSCI 594b or SSCI 594z | Master’s Thesis
(Provisional Draft)

Units: 2

Term-Day-Time: Summer, 2016, Asynchronous Online

Location: Online, via Blackboard

Instructor: Robert O. Vos
Office: AHF B57B
Regular Office Hours: Mon. and Wed. from 10-11:00 a.m.
Office Hours by Appointment: Just request via email!
Email: vos@usc.edu
Office Phone: 213-821-1311
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GIS Librarian Help: Katharin Peter
Office: VKC B40a
Office Hours: By appointment
Contact Info: kpeter@usc.edu, 213-740-1700 (office)

IT Help: Richard Tsung
Hours of Service: Mondays to Fridays, 9:00 a.m.-5:00 p.m.
Contact Info: ctsung@usc.edu, 213-821-4415 (office)
Course Description
This course and its prerequisites, SSCI 594a (and in the case of SSCI 594z, SSCI 594b) are required for the Master of Science degree in Geographic Information Science and Technology (GIST) Program; they are not applicable to the GIST Graduate Certificate programs. The purpose of these courses is to accomplish a project demonstrating ability (PDA) in the spatial sciences, culminating the student’s experience in the M.S. in GIST Program and validating them as a master practitioner.

Based upon the thesis proposal completed in SSCI 594a and with the approval of the Spatial Sciences Institute faculty, most students will complete their research and writing and successfully defended their thesis in SSCI 594b.

If you have enrolled in SSCI 594z, it means you have failed to complete these milestones in SSCI 594b, and the goal now will be to get caught up so that you can complete your thesis research and writing and successfully defend your thesis in SSCI 594z. This is a collaborative experience and as such, you need to budget sufficient time in your schedule for frequent communications with your advisor and the other members of your thesis guidance committee and for sharpening one or more of your writing, programming, analysis, modeling, and mapping skills.

Learning Objectives
On completion of this course, students 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 and execute a credible, meaningful research project for yourself.
- Utilize the Microsoft Office™ software suite and a bibliographic reference manager competently and efficiently to produce documents that meet GIST M.S. Program requirements and show your work to advantage.
- Understand the competencies that must be demonstrated in the form of a master’s thesis manuscript in the GIST M.S. Program.
- Describe your master’s PDA succinctly, in written and oral forms, to faculty, mentors, and the public.

Prerequisite(s): SSCI 594a and/or SSCI 594b
Co-Requisite(s): None
Concurrent Enrollment: None
Recommended Preparation: Students must be enrolled in the M.S. in GIST Program and have an approved thesis proposal, with an advisor assigned.
Course Notes

The preparation and defense of your master’s thesis is the culminating experience in the M.S. in GIST Program. Students are expected to work with a high level of self-motivation. Successful students exercise initiative and exhibit strong and consistent communication skills in working with their advisors and committee members.

Upon successful completion of the thesis, the In-Progress (IP) grade received in SSCI 594a will be converted to Passing (P), and students will also receive a Passing (P) grade for SSCI 594b and if applicable SSCI 594z.

Technological Proficiency and Hardware/Software Required

Every student must satisfy the following technology requirements:

- A computer with a fast Internet connection.
- A functional webcam and a microphone for use whenever a presentation or meeting is scheduled. *(Required for remote thesis defenses!)*
- A modern web browser, Firefox recommended, to access the GIST Server.

*GIST server and tech support* – Students in this course will utilize the Spatial Sciences Institute GIST Server, which is a virtual desktop, for independent thesis work (e.g. to explore datasets, perform analysis, and perhaps for writing as well). Via the GIST server, you may use a variety of software including ArcGIS, eCognition, TerrSet, SPSS, and related web services and geospatial processing software. If enrolled in SSCI 594b, it is expected that you will complete the bulk of your research in the first 8 weeks of the course, leaving the main task to be writing the complete thesis document. If enrolled in SSCI 594z, the expectation is that the bulk of the research is complete and that the main task left is to write the thesis document itself.

You can access the GIST Server at: [https://gistonline.usc.edu/](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 Mondays through Fridays, 9:00 a.m. to 5:00 p.m. PT. Please be sure to be specific with respect the problem you are experiencing as whatever work is required will more than likely be unique to each thesis project.

*Live meetings, recorded meetings, and presentations (including defenses)* – AdobeConnect 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. In our experience, AdobeConnect works best if you have both a phone (mobile or land line) and a computer with a fast Internet connection available during our live meetings.
Required Readings and Supplementary Materials

Students will continue to refer to the textbooks that were required in SSCI 594a:


Description and Assessment of Assignments

This course consists of a variety of project work tasks and the writing of the thesis document itself. Specific project work tasks and associated deadlines are agreed to in the first week of the course with each student on a "Timetable" document. In general, the GIST thesis consists of 5 chapters. To make timely progress in the course, students should be writing chapters throughout the semester. I award 10 points for each chapter when it is complete. However, it is typical for each chapter to require at least 1-2 cycles of revision with my input before they are ready to be folded into a complete thesis draft. To be ready for the defense, the complete thesis draft must include, title page, front matter, reference list, and proper formatting throughout. In general, students may expect a one-week turn around time from me for feedback on written work. The defense draft must be prepared no later than one week before the scheduled defense date for distribution to the full committee. Students should plan accordingly.

Grading Breakdown

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number</th>
<th>% of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft Chapter 1</td>
<td>≥1</td>
<td>10</td>
</tr>
<tr>
<td>Draft Chapter 2</td>
<td>≥1</td>
<td>10</td>
</tr>
<tr>
<td>Draft Chapter 3</td>
<td>≥1</td>
<td>10</td>
</tr>
<tr>
<td>Draft Chapter 4</td>
<td>≥1</td>
<td>10</td>
</tr>
<tr>
<td>Draft Chapter 5</td>
<td>≥1</td>
<td>10</td>
</tr>
<tr>
<td>Complete Defense</td>
<td>≥1</td>
<td>30</td>
</tr>
<tr>
<td>Draft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation Slides</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Defense</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Thesis Upload</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>TOTALS</td>
<td>≥8</td>
<td>100</td>
</tr>
</tbody>
</table>
Assignment Submission Policy

Thesis assignments will be submitted for feedback directly to the instructor via email using the due dates specified in the Timetable we have individually agreed upon. Although it will likely take several turns of revisions on email and individual meeting, points for completing each thesis element will be recorded on Blackboard when each assignment is complete. The standard for a complete “Draft Chapter” is a chapter in shape such that the instructor thinks that only minor revisions are required to add the chapter to a “Complete Defense Draft.” The standard for a “Complete Defense Draft” is a complete, properly formatted thesis manuscript that in the judgment of the instructor has a reasonable chance of passing muster at the oral defense.

Two idealized schedules for assignments are listed below. The first schedule (i.e. Option #1) would lead to a successful defense and upload of your thesis document ahead of the July 1 Summer Semester 2016 thesis submission deadline whereas the second schedule (i.e. Option #2) would lead to a successful defense and upload of your thesis document ahead of the Fall 2016 Last Day to Register and Add Classes deadline (September 9, 2016). Option #1 is required for you to be counted as a August 2016 graduate and Option #2 uses the whole of the Summer 2016 semester and would allow you to be counted as a December 2016 graduate without the need to register and pay additional tuition in Fall Semester 2016. 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) no written work will be accepted for grading after 5:00 p.m. PT on the last day of classes (i.e. 12/4/15). These grades are important because students who fail to make consistent and measurable progress, who do not earn a grade of at least 50%, and who fail to complete at least second drafts of all five chapters will not be permitted to enroll in subsequent SSCI 594z sections unless there are extenuating circumstances.

Additional Policies

Communications – This is a distance learning course, so most of our interactions will be asynchronous (not at the same time). All materials to be handed in will be submitted via Blackboard (Resume assignment) or via email (all else). Please be sure that you read as soon as possible all email sent from Blackboard or from me. Check now to make sure that mail sent from both the USC Blackboard accounts and my private domain (vos@usc.edu) does not go into your junk mail!

Collaboration/Weekly Meetings – The roles of the thesis student and advisor are similar to those of a driver and passenger traveling by car from Los Angeles to San Francisco. The driver takes charge and anticipates and executes most of the tasks that are needed to travel from Los Angeles to San Francisco. The passenger offers the occasional advice and gives directions when asked and/or needed. The importance of the analogy starts with the two people taking a trip together in a car and continues with the driver and passenger working with and helping each other to accomplish a specific goal. To do this, we must both cast our eyes on the overall journey and all the detailed twists and turns along the
route. And, most importantly we must communicate regularly with one another about this! Therefore, I provide a one-hour time slot for meetings with each of my thesis students each week. If we do not need to meet, we can confer over email and skip it, but it is crucial in my experience that at minimum we each make this time available to one another throughout the semester. In rare cases, to accommodate shifts in either of our schedules, our meeting may be rescheduled from its regularly appointed day and time.

Casting our minds back to the Los Angeles to San Francisco road trip, the driver —i.e., YOU the thesis student! -is the person in charge and whose work and priorities will determine success or failure. The passenger (i.e. me the faculty thesis advisor) can assist only so long as the driver starts the engine, puts the car in drive, and puts their hands on the steering wheel and their feet on the accelerator and or brake at all the appropriate times from the start to the finish of this trip.

**Tentative Course Schedule: Option 1 – A Weekly Breakdown**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics / Daily Activities</th>
<th>Deliverables / Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review and/or revise <em>Chapter 1: Introduction</em> and <em>Chapter 2: Related Work</em> and <em>Chapter 3: Methods and Data Sources</em> and send to advisor. Enter course with project work largely complete.</td>
<td>Create user profile on the Graduate School Thesis Center website, send Chapters 1-3 and schedule kickoff meeting with advisor.</td>
</tr>
<tr>
<td>2</td>
<td>Meet with advisor to review first three chapters, thesis guidance committee membership, and plans, milestones, deliverables, etc. for the remainder of the semester.</td>
<td>Upload Appointment of Committee form to Thesis Center website and schedule meeting with Thesis Guidance Committee.</td>
</tr>
<tr>
<td>3</td>
<td>Complete Chapters 1-3 revisions and send to advisor. Prepare and make methods presentation to full thesis guidance committee if you have yet done so.</td>
<td>Make methods presentation and send chapters 1-3 to full thesis guidance committee.</td>
</tr>
<tr>
<td>4</td>
<td>Complete <em>Chapter 4: Results</em> and <em>Chapter 5: Discussion and Conclusions</em> and send to advisor.</td>
<td>Send chapters 4-5 to advisor.</td>
</tr>
<tr>
<td>5</td>
<td>Complete Chapters 4-5 revisions and send to advisor. Begin work to revise and proof full draft of thesis. Complete full thesis draft and send to advisor.</td>
<td>Send chapters 4-5 revisions to advisor. Send full draft to advisor for review.</td>
</tr>
<tr>
<td>6</td>
<td>Revise full thesis draft and send back to advisor. Send full draft to full thesis guidance committee, schedule thesis defense (if appropriate), and prepare presentation slides for the defense.</td>
<td>Revise and proof full draft of thesis. Send full draft to thesis guidance committee, schedule defense, and prepare presentation slides.</td>
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</tbody>
</table>
My Thoughts on Option #1: This is a very aggressive schedule for both you (the student) and myself (the thesis advisor) but of course one could aim for this outcome and settle for Option #2 if for some reason you fall behind. I have seen dedicated and organized students in our program make it according to this schedule, especially if they have completed much of their project during SSCI 594a. This schedule is listed as option (1) in the timetable I provide to you at the start of the course.

Tentative Course Schedule: Option #2 – A Weekly Breakdown

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics / Daily Activities</th>
<th>Deliverables / Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 18-May*</td>
<td>Review and/or revise Chapter 1: Introduction and Chapter 2: Related Work and Chapter 3: Methods and Data Sources and send to advisor. Schedule kickoff meeting with advisor.</td>
<td>Create user profile on the Graduate School Thesis Center website, send Chapters 1-3 to advisor, schedule kickoff meeting with advisor.</td>
</tr>
<tr>
<td>Week 2 23-May</td>
<td>Meet with advisor to review first three chapters, thesis guidance committee membership, and plans, milestones, deliverables, etc. for the remainder of the semester.</td>
<td>Upload Appointment of Committee form to Thesis Center website, meet with advisor, schedule meeting with Thesis Guidance Committee.</td>
</tr>
<tr>
<td>Week 3 30-May**</td>
<td>Complete Chapters 1-3 revisions and send to advisor. Prepare and make methods presentation to full thesis guidance committee if you have yet done so.</td>
<td>Make methods presentation to guidance committee, send chapters 1-3 to full thesis guidance committee.</td>
</tr>
<tr>
<td>Week 4 6-Jun</td>
<td>Project activity and work, chapters 4 and 5 outlines or drafts</td>
<td></td>
</tr>
<tr>
<td>Week 5 13-Jun</td>
<td>Project activity and work, chapters 4 and 5 outlines or drafts</td>
<td></td>
</tr>
<tr>
<td>Week 6 20-Jun</td>
<td>Project activity and work, chapters 4 and 5 outlines or drafts</td>
<td></td>
</tr>
<tr>
<td>Week 7 27-Jun</td>
<td>Project activity and work, chapters 4 and 5 outlines or drafts</td>
<td>Draft Chapter 4</td>
</tr>
</tbody>
</table>

*Classes start on Wednesday May 18
**Monday May 30 is Memorial Day, USC Holiday
| Week 8
4-Jul*** | Project activity and work, chapters 4 and 5 outlines or drafts All technical and project work completed | Draft Chapter 5 Present completed technical work to advisor and/or guidance committee |
| Week 9
11-Jul | Complete revisions of Chapters 4 and 5 as required | Revised Chapters to Advisor as Required |
| Week 10
18-Jul | Complete one more round of revisions (if necessary), proof full thesis draft, and send to advisor | Send full “Thesis Defense Draft” to Advisor |
| Week 11
25-Jul | Send thesis draft to thesis guidance committee and schedule defense, make revisions according to thesis Advisor feedback on the Defense Draft | Send draft to thesis guidance committee and schedule defense. |
| Week 12
1-Aug | Prepare presentation slides for defense. | Prepare and send presentation slides to advisor for review. |
| Week 13
11-Apr | Conduct defense. Following defense, complete final revisions and gather signatures on Approval to Submit form. | Conduct defense, complete revisions, and obtain for electronic approvals to upload thesis. |
| End of Semester

*Classes start on Wednesday May 18
**Monday May 30 is Memorial Day, USC Holiday
***Monday July 4 is the USC Holiday for Independence Day

**My Thoughts on Option #2:** This is a bold schedule as well, but one we expect and anticipate that the vast majority (>90%) of our M.S. thesis candidates will satisfy. There is a little cushion built into this schedule because you could still avoid the next semester’s tuition so long as you upload before that semester’s drop/add date. The best advice is to aim to finish by no later than the last week this semester so that you have a bit of cushion built in in case of things go off track at some point. This schedule is listed as option (2) in the timetable I provide to you at the start of the course.
Statement on Academic Conduct and Support Systems

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, Behavior Violating University Standards and Appropriate Sanctions, accessible here: https://studentaffairs.usc.edu/scampus/. Other forms of academic dishonesty are equally unacceptable. See the university policies on scientific misconduct: http://policy.usc.edu/scientific-misconduct.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ or to the Department of Public Safety via either of these forms: http://dps.usc.edu/contact/report/ or http://web-app.usc.edu/web/dps/silentWitness/. The Center for Women and Men http://engemannshc.usc.edu/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage http://sarc.usc.edu/ describes reporting options and other resources.

Help with scholarly writing is provided by a number of USC’s schools. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the American Language Institute http://ali.usc.edu/, which sponsors courses and workshops specifically for international graduate students.

Help arranging accommodation for students with disabilities is provided by the Office of Disability Services and Programs http://dsp.usc.edu/.

Emergency information will be posted at http://emergency.usc.edu. If an officially declared emergency makes travel to campus infeasible, this website will provide safety and other updates, including ways in which instruction will be continued by means of Blackboard, teleconferencing, and other technology.

Resources for Online Students
Our course Blackboard site provides links to several different resources that you may need. In particular, you will be making frequent use of the online USC Library that is available to all registered students through the link http://www.usc.edu/libraries. Once on this site, you can find additional resources for distance students under the link “Library Services”. Many other resources and links to key people you may need to contact are also listed on the Blackboard site under Other Resources and Contacts.