SSCI 594b, Master’s Thesis

Syllabus

Units: 2

Term — Day — Time: Spring 2022, Online

Location: Online

Instructor: An-Min Wu, PhD
Office: To be coordinated using Zoom meeting space
Office Hours: Per planned and agreed upon meeting dates and times.
Contact Info: anminwu@usc.edu

Library Help: Andy Rutkowski
Office: VKC 36B
Office Hours: Tue 10 a.m. to 12 p.m. and Thu 4:30 p.m. to 5:30 p.m. PT
Contact Info: arutkows@usc.edu, 213-740-6390

IT Help: Richard Tsung
Office: AHF 146
Office Hours: By appointment
Contact Info: ctsung@usc.edu, 213-821-4415
**Course Description**

This course and its prerequisite, SSCI 594a, are required for the Master of Science degree in the Geographic Information Science and Technology (GIST) Program. They are not applicable to the GIST Graduate Certificate program or any other SSI programs. The purpose of these courses is to complete a thesis in the spatial sciences, culminating students’ experiences in the M.S. in GIST Program and demonstrating that they are master practitioners. Based upon the thesis proposal and analytical work completed in SSCI 594a, and with the approval of the Spatial Sciences Institute faculty, students should be undertaking SSCI 594b to complete their project (technical) work, write their thesis manuscript, and successfully defend their thesis.

**Learning Objectives**

On completion of this course, students will be able to:

- Design a meaningful research project that demonstrates spatial thinking and uses the knowledge and skills learned while in the GIST Program.
- Articulate research and/or project objectives clearly, situate research within its academic or scholarly context, state claims and evidence unambiguously, and assess the validity of claims, evidence, outcomes, and results.
- Author a document narrating the research process in the form of a formal, multi-chapter master’s thesis manuscript, structured according to the approved M.S. in GIST thesis style.
- Utilize appropriate word processing software and a bibliographic reference manager to produce documents that meet M.S. in GIST Program requirements.
- Describe their master’s research clearly and succinctly, in written and oral forms, to faculty, mentors, and potential sponsors.

Students may vary in their competency levels on these abilities. Students can expect to acquire these abilities only course policies are honored, meetings are attended, and assigned work is completed.

**Prerequisite(s):** SSCI 594a  
**Co-Require(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 and committee members assigned.

**Class Conduct**

*Harassment, sexual misconduct, interpersonal violence, and stalking* are not tolerated by the university. All faculty and most staff are considered Responsible Employees by the university and must forward all information they receive about these types of situations to the Title IX Coordinator. The Title IX Coordinator is responsible for assisting students with supportive accommodations, including academic accommodations, as well as investigating these incidents if the reporting student wants an investigation. The Title IX office is also responsible for coordinating supportive measures for transgender and nonbinary students such as faculty notifications, and more. If you need supportive accommodations you may contact the Title IX Coordinator directly ([titleix@usc.edu](mailto:titleix@usc.edu) or 213-821-8298) without sharing any personal information with me. If you would like to speak with a confidential counselor, Relationship and Sexual Violence Prevention Services (RSVP) provides 24/7 confidential support for students (213-740-9355 (WELL); press 0 after hours)
Course Structure

The preparation and defense of the master’s thesis is the culminating experience in the M.S. in GIST Program.

After completing SSCI 594a, students are expected to have a well-vetted version of a draft of the first half of their thesis- the Abstract, Introduction, Background, and Methodology (the “thesis proposal”). Some students come into the course having already begun technical work, while others are just beginning their technical work.

This course requires individual effort that is overseen by the course instructor, the thesis advisor. Students begin by establishing a timeline for their completion process. Once the timeline is agreed upon by the student and the advisor, weekly meetings are held to discuss progress, problem solve, and review submitted documents. Mid-semester, once project work has been completed, students will update their committee on their progress and receive feedback. From there, individual thesis chapters are written and revised iteratively until the student and advisor agree that the document is ready for submission to the Thesis Committee.

Students should be prepared to submit a final manuscript well in advance of the final deadline to account for revisions, scheduling, and other potential challenges. After the committee reviews the thesis document, an oral defense of the thesis is held. There are two components of this culminating event- the presentation and the thesis document itself. The possible outcomes of the thesis defense are “fail” the oral defense with no opportunity to repeat it, “fail” the oral defense with need to revise the manuscript and repeat the oral defense, “pass” the oral defense with revisions required to the manuscript, or “pass” the oral defense with approval for immediate upload of the manuscript to the thesis center. Should the student “pass” the oral defense yet need revisions to the manuscript, it will be under the guidance of the thesis advisor, though committee members may request to review the manuscript again. Upon successful completion of the thesis, the In-Progress (IP) grade received in SSCI 594a will be converted to Passing (P), and students also will receive a Passing (P) grade for SSCI 594b.

Successful students in this course exercise initiative and exhibit strong communication skills in working with their advisors and committee members. This process is fast-paced, and students are expected to have a high level of self-motivation.

Technological and Communication Requirements

ArcGIS is provided online via the GIST Server; hence, you do not need to install it on your own computer. Instead, every student must have 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.
- An up-to-date web browser to access the Server

If a student does not have access to any of these, please speak with the instructor at the start of the semester. Also, see the USC ITS Student Toolkit here: https://keepteaching.usc.edu/students/student-toolkit/

Blackboard – While students will complete their work independently, a course Blackboard site is available to provide guidance as to the required administrative processes and manuscript format. Links to necessary timetables, procedures, and forms will be found here, as well as discussion boards through which students can share ideas with other thesis students. However Blackboard is
typically used less in this course than in previous courses the student may have taken while enrolled in the GIST M.S. Program. During the first week of the semester, each student should confirm that they can access the Blackboard site. All communications that are sent through it should be read promptly.

The student and advisor will agree on their preferred way of communicating and sharing documents, which can include Blackboard, email, and third-party document sharing sites.

**SSI server and tech support** – Students in this course will utilize the Spatial Sciences Institute Server for independent thesis work as needed. If a student is unable to connect to the server or experiences technical issues, an email should be sent to SSI Tech Support at spatial_support@usc.edu and the instructor should be copied (cc). The email sent to SSI Support should be specific with respect to the problem being experienced.

**Zoom** – Zoom 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 individual meetings and presentations. To use Zoom, each student needs a web cam on a computer with a fast internet connection. It is useful also to have a phone (mobile or landline) on hand in case there are issues with the web cam audio.

**Communications** – This is a distance learning course, so many interactions will be asynchronous (not at the same time). All materials to be handed in will be submitted via Blackboard or via email. Students should check to make sure that mail sent from both the USC Blackboard accounts and directly the instructors usc.edu account does not go into junk mail. Students should read as soon as possible all email sent from Blackboard or from the instructor.

**Required Readings and Supplementary Materials**

Students will continue to refer to the textbooks that were required in SSCI 594a. No new textbooks need to be purchased unless required for the students’ particular thesis topic.


   This book provides a detailed reference to the Chicago 16th edition reference and citation style that must be used to meet the SSI GIST thesis format requirements.


   This book provides guidance on the undertaking and design of research in Spatial Science.

**Description and Assessment of Assignments**

There is only one “assignment” in this course- a completed thesis document that conforms to USC SSI guidelines and has been approved by both the thesis advisor and the committee. As every research project is different, there are no formal, standardized assignments in this course. Students will rely heavily on the GIST Thesis Style Guide and GIST Thesis Formatting Template. In consultation with the course instructor (the thesis advisor), students develop a work schedule with specified deliverables. Weekly individual meetings will be held either by phone or via BlueJeans to discuss deliverables and revise the work plan as needed.
Students will continue to work on their project presentation, typically a PowerPoint, that they began in 594a. They will present this to their committee at their first committee meeting, update and redistribute to the committee mid-semester, and revise and give the full presentation formally at the thesis defense.

**Grading Breakdown**

Since there are no assignments, there are grades in this course. Completion of this course is determined when each member of the thesis committee digitally signs the “Approval to Upload” form. This form is signed after successful completion of the oral defense and acceptance by each committee member of the thesis document.

**Course Schedule**

In consultation with the course instructor, each student will develop their own work schedule for the course. This schedule will be uploaded into Bb at the beginning of the semester and revised as needed as work progresses.

There are two possible schedules to follow in this course. Option 1 is very aggressive and requires that most or all of the technical project work has already been completed in advance of the beginning of the semester. Much of the writing should also be completed. Thus, the work in 594b involves only finalizing, defending, and revising the thesis document. If successful in this aggressive timetable, students will be able to upload by mid-semester and achieve a degree dated at the end of this semester.

Option 2 is the more commonly followed schedule, allowing time for the project work to be completed in addition to the thesis preparation, revision, and defense. By uploading before the beginning of the following semester, students will avoid having to register and pay for 594z, though degrees will be dated at the end of the following semester.

**Option 1 Basic Timetable** – All or most technical work is completed before the semester starts. The full thesis manuscript is written, defended, approved, and uploaded before the Graduate School’s deadline that normally falls during Week 10. The M.S. Degree will be dated at the end of the semester.

<table>
<thead>
<tr>
<th>Date</th>
<th>Tasks</th>
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<tbody>
<tr>
<td>Week 1 (or earlier)</td>
<td>Prepare work schedule. Meet with advisor and committee. Continue work on thesis draft.</td>
</tr>
<tr>
<td>Week 2-4</td>
<td>Write full thesis draft. Iteratively submit sections to advisor for review.</td>
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<td>Weeks 5</td>
<td>Submit draft to committee.</td>
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<td>Week 6</td>
<td>Give defense.</td>
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<td>Week 7</td>
<td>Final revisions, committee approval.</td>
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<td>Week 8</td>
<td>Upload final thesis.</td>
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**Option 2 Basic Timetable** – All work completed by the end of the semester. Registration in next semester not required, however the M.S. Degree will be dated at the end of the following semester.
<table>
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<tr>
<th>Date</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 (or earlier)</td>
<td>Prepare work schedule.</td>
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<td></td>
<td>Meet with advisor and committee.</td>
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<tr>
<td>Week 2</td>
<td>Committee meeting.</td>
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<td>Begin technical work.</td>
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<tr>
<td>Weeks 3 to 6</td>
<td>Complete technical work.</td>
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<td>Weeks 7 to 10</td>
<td>Write full thesis draft.</td>
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<td>Iteratively submit sections to advisor for review.</td>
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<tr>
<td>Week 11</td>
<td>Give defense.</td>
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<td>Weeks 12</td>
<td>Final revisions, committee approval.</td>
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<tr>
<td>Exam week</td>
<td>Upload final thesis.</td>
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The Early Submission Deadline is available in the Fall and Spring semesters. Students will be exempt from registering for 594 or 794 in a given semester if they have met the continuous enrollment requirement, completed all required checklist items by the Early Submission Checklist Submission deadline, and uploaded the manuscript to the Graduate School Thesis Center by the Early Submission Manuscript Submission deadline.

**Statement on Academic Conduct and Support Systems**

**Academic Conduct**

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” [https://policy.usc.edu/files/2020/07/SCampus-Part-B-1.pdf](https://policy.usc.edu/files/2020/07/SCampus-Part-B-1.pdf). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, [policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct).

**Support Systems**

*Counseling and Mental Health* – (213) 740-9355 – 24/7 on call [engemannshc.usc.edu/counseling](http://engemannshc.usc.edu/counseling)

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*National Suicide Prevention Lifeline* – 1 (800) 273-8255 – 24/7 on call [www.suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org)

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*Relationship and Sexual Violence Prevention Services (RSVP)* – (213) 740-9355(WELL), press “0” after hours – 24/7 on call [studenthealth.usc.edu/sexual-assault](http://studenthealth.usc.edu/sexual-assault)

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

**Reporting Incidents of Bias or Harassment** – (213) 740-5086 or (213) 821-8298

[usc-advocate.symplicity.com/care_report](usc-advocate.symplicity.com/care_report)

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

**The Office of Disability Services and Programs** – (213) 740-0776
dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

**USC Campus Support and Intervention** – (213) 821-4710
campussupport.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

**Diversity at USC** – (213) 740-2101
diversity.usc.edu

Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

**USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call**
dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

**USC Department of Public Safety** – - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dps.usc.edu

Non-emergency assistance or information.

**Resources for Online Students**

The Course Blackboard page and the GIST Community Blackboard page have many resources available for distance students enrolled in our graduate programs. In addition, all registered students can access electronic library resources through the link [https://libraries.usc.edu/](https://libraries.usc.edu/). Also, the USC Libraries have many important resources available for distance students through the link: [https://libraries.usc.edu/faculty-students/distance-learners](https://libraries.usc.edu/faculty-students/distance-learners). These include instructional videos, remote access to university resources, and other key contact information for distance students.