SSCI 594b (35751), Master’s Thesis

Syllabus

Units: 2

Term Day Time: Summer 2021

Location: Online

Instructor: Leilei Duan, Ph.D.
Office: AHF B55J
Regular Office Hours: Tuesday 8:00 – 9:00 a.m. PT and Thursday 1:00 - 2:00 p.m. PT, and by appointment via email.
Contact Info: leileidu@usc.edu, 213-740-6532 (office), see Contact page on Blackboard for Zoom Room

Library Help: Andy Rutkowski
Office: VKC 36B
Office Hours: Thu 10:00 am-12:00 pm PT
Contact Info: arutkows@usc.edu
Zoom: Provided via Blackboard

IT Help: Richard Tsung
Office: AHF 145D
Office Hours: By appointment
Contact Info: spatial_support@usc.edu
Course Scope and Purpose

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 Outcomes

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 an 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.

Prerequisite(s): SSCI 594a
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 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 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 Proficiency and Hardware/Software Required

All course materials will be organized through Blackboard. The main theoretical concepts will be provided through assigned readings. The editing and writing exercises are designed to improve student’s writing skills as necessary for completion of the thesis.

There are two technology requirements:

- Every student must have a computer with a fast Internet connection.
- Every student must have a functional webcam for use whenever a presentation or meeting is scheduled.
The technologies that facilitate coursework and interactions include:

**Blackboard (Bb)** – If a student is registered for this course, it will show up on Bb in one’s list of available classes no later than 12:00 noon PT on the first day of classes. All course materials will be posted on Bb, and students are required to submit their work via Bb. The course will also use Bb to host online discussions, including two graded discussion forums on specific topics and general forum for course questions. However, students should use email to contact peer review partners and to reach the instructor if a question needs an immediate answer.

**Google Drive** – The course will use the cloud-based service Google Drive to organize and store materials for peer review. A shared folder will be created early in the course for students to share work with each other. Deliverables to the instructor are always delivered via Bb for grading.

**Zoom** – Zoom is a browser-based service that facilitates synchronous, interactive sessions with video and shared desktop capabilities between two or more people; this is the primary forum for seminars and presentations. In addition to a web cam on a computer with a fast internet connection, it is useful to have a phone (mobile or landline) on hand in case there are issues with computer audio.

**SSI server and tech support** – Unlike other courses in the GIST program, students in this course will utilize the SSI Server only for independent thesis work (e.g. to explore datasets and perform initial analysis). Relative to other courses in the program, work with GIS tools on the server is not expected to be a major component of activity in this course. If a student is unable to connect to the server or experiences any type of technical issue, they should send an email to SSI server support staff at spatial_support@usc.edu (spatial underscore support at usc dot edu), making sure to copy (cc) the instructor on the email. Students should be sure to be specific with respect to the problem being experienced, as technical issues often vary according to each thesis project.

**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 Zoom 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 no 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 regular submission deadline that normally falls during Week 10. The M.S. Degree will be dated at the end of this semester.

<table>
<thead>
<tr>
<th>Date</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 (or earlier)</td>
<td>Prepare work schedule.</td>
</tr>
<tr>
<td></td>
<td>Meet with advisor and committee.</td>
</tr>
<tr>
<td></td>
<td>Continue work on thesis draft.</td>
</tr>
<tr>
<td>Week 2-4</td>
<td>Write full thesis draft.</td>
</tr>
<tr>
<td></td>
<td>Iteratively submit sections to advisor for review.</td>
</tr>
<tr>
<td>Weeks 5</td>
<td>Submit draft to committee.</td>
</tr>
<tr>
<td>Week 6</td>
<td>Give defense.</td>
</tr>
<tr>
<td>Week 7</td>
<td>Final revisions, committee approval.</td>
</tr>
<tr>
<td>Week 8</td>
<td>Upload final thesis.</td>
</tr>
</tbody>
</table>

**Option 2 Basic Timetable**

Registration in the next semester is not required if the thesis is uploaded before the Graduate School’s early submission deadline at the start of the next semester (see below). However, the M.S. Degree will be dated at the end of the following semester.

<table>
<thead>
<tr>
<th>Date</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 (or earlier)</td>
<td>Prepare work schedule.</td>
</tr>
<tr>
<td></td>
<td>Meet with advisor and committee.</td>
</tr>
<tr>
<td>Week 2</td>
<td>Committee meeting.</td>
</tr>
<tr>
<td></td>
<td>Begin technical work.</td>
</tr>
<tr>
<td>Weeks 3 to 6</td>
<td>Complete technical work.</td>
</tr>
<tr>
<td>Weeks 7 to 10</td>
<td>Write full thesis draft.</td>
</tr>
<tr>
<td></td>
<td>Iteratively submit sections to advisor for review.</td>
</tr>
<tr>
<td>Week 11</td>
<td>Give defense.</td>
</tr>
<tr>
<td>Week 12</td>
<td>Final revisions, committee approval.</td>
</tr>
<tr>
<td>Week 13</td>
<td>Upload final thesis.</td>
</tr>
</tbody>
</table>

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. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call studenthealth.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 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
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) - (213) 740-5086 | Title IX – (213) 821-8298 equity.usc.edu, titleix.usc.edu
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
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.