

NEUR 494
NEUROSCIENCE HONORS THESIS
Spring 2025

Faculty:

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Meetings: 12:30-1:30 PM Thursday, in HNB 120F. If you are unable to attend a class for some compelling reason, please be sure to notify both of the above faculty by e-mail in advance.

Course materials will be available on Brightspace: <https://brightspace.usc.edu/>.

1. The goal of this course is to support, stimulate and evaluate the honors student writing her/his thesis. 494 students are expected to participate in the weekly honors seminar (NEUR 493) as a means of maintaining communication between the thesis student and the faculty and other honors students, and to provide leadership and mentoring by asking questions and exchanging ideas based on the oral presentations made by 493 students.

2. **The student must meet with their PI and in-lab advisor during the first two weeks of the semester to establish deadlines for writing.** Please read the “494 Writing Schedule” doc carefully, which includes a contract that must be signed by each student’s PI and in-lab advisor. The professor under whom the student’s research is being done (the PI of the lab) has primary responsibility for supervising writing and editing of the thesis; an in-lab advisor (senior grad student or postdoc) can also be included on the contract in addition to the PI. One of the course instructors will serve as a “Committee Member”. *Each student must meet with his or her in-lab advisor and PI on a regular basis*; students are encouraged to set up a weekly meeting time with their PI and in-house advisor at the beginning of the semester. At the first meeting, which should be held within the first 1-2 weeks of the semester, the schedule for writing the thesis should be discussed using the “494 Writing Schedule”; in addition, the PI and the in-lab advisor must sign the contract in the Writing Schedule and each student is required to email a signed copy to the instructors. Be sure to go over the Writing Schedule doc with the PI of your lab and your in-lab advisor before they sign it.

Also make an early decision with your PI on including an explicit statement describing your specific contribution to the research in the Methods section of your thesis. Drafts of the thesis should only be submitted to the course instructors (your Committee Member) when they are ready to be seen by an outside reviewer – i.e., when you have gone through *at least two rounds of editing* within your lab with your PI and in-lab advisor.

3. Each 494 student will give an oral presentation based upon his/her thesis. This talk (thesis defense) should include a PowerPoint presentation and be ~20-22 min in duration; each talk will be presented in our annual NEUR Symposium at the end of the semester. This year’s symposium is on Monday MAY 5 2025 from ~9-4 pm. Mark your calendars!

4. The finished thesis should be in the form of a manuscript submitted to a scientific journal (with Abstract, Introduction, Methods, Results, Discussion, References, and Figures/Figure Legends) and must be submitted as a pdf in electronic form by the date of the final examination.

5. Students requesting academic accommodations are required to register with Disabilities Services and Programs (DSP) each semester, as instructed at the end of this document.

Helpful Hints for Oral Defense Presentations in 494

Start: Introduce yourself and give your title and the name of your advisor (which should also be on the first slide of your PowerPoint). Plan on speaking for ~20-25 min so there will be plenty of time for questions. After that:

1. Keep your mind on the big picture! Remember to give an overview at the beginning; explain the rationale and background (briefly) for the results you are going to describe, and say why the question being investigated is interesting and important. **START** by *peaking the interest of your listeners!*
2. Aim for a crisp, well organized, succinct presentation. It is **not** necessary to give a blow-by-blow description (usually it's preferable not to give all the gory details, but concentrate on the results and what they mean). Prioritize in terms of deciding what information is critical, and think about tailoring it to the specific audience you will be addressing. Give a brief, clear exposition of the results and what they mean. You want to develop a coherent story that engages the interest of a general audience.
3. Be prepared – write a short (< 1 page) summary in advance if you want to use notes. Concentrate on a coherent story line; think about what questions you are hoping to get. Give at least one practice talk to friends or lab members at least 1-2 days before your presentation. Remember, you have only ~20-22 minutes in which to convey your story – concentrate on giving as much specific information (especially regarding experimental results and what they mean) as possible.
4. Do not use your PowerPoint slides as a crutch. It is better to express your information with enthusiasm and some spontaneity. Try **not** to read extensively from notes or from your slides or to spend lots of time looking down; people will be a lot more interested if you look up and out into the audience.
5. Remember to take a giant step **BACK** at the end of your presentation (as at the beginning) – **FINISH** by *fulfilling the interest of your listeners!* Frequently speakers are so closely focused on the details that they forget that people in the audience may not know much about the topic in general. Remember you are usually trying to explain something that people in the audience know little about. Ask yourself: what is the main take-home message I want to convey? The better you are at getting your information across, the better you will be at communicating in general, so this is great practice!
6. Last but not least: try not to say “um”, “like”, “basically” multiple times during your talk. If you fall into the habit of repeating such words as a crutch to “fill the empty space”, it can be difficult to break this habit (although it is possible!). It is very distracting to the audience to hear multiple repetitions of a single word (and one that has little or no informational content).
7. Good luck, and have fun!

Disabilities. Students requesting academic accommodations based on a disability are required to register with Office of Student Accessibility Services (OSAS). This is the unit at USC responsible for ensuring equal access for students with disabilities in compliance with state and federal law. OSAS serves undergraduate, graduate and professional students; on-ground and on-line students; and students in all credit-granting courses and programs of study. <https://osas.usc.edu/> (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://www.usc.edu/dept/publications/SCAMPUS/gov/>. 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/>.

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" policy.usc.edu/scampus-part-b. 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:

Student Health Counseling Services - (213) 740-7711 – 24/7 on call
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
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) 740-4900 – 24/7 on call
engemannshc.usc.edu/rsvp

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX)
- (213) 740-5086

<https://eeotix.usc.edu/>

Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

Office of Student Accessibility Services (OSAS) (213) 740-0776

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Bias Assessment Response and Support - (213) 740-2421

studentaffairs.usc.edu/bias-assessment-response-support

Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

USC Support and Advocacy - (213) 821-4710

studentaffairs.usc.edu/ssa

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.