



## NEUROSCIENCE HONORS SEMINAR (NEUR 493, Spring 2025) (PROVISIONAL)

Faculty:

**Jeffrey Moore**

HNB 520

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Meetings: 12:30-1:30 PM, Thursday in HNB 107.

If you are unable to attend a class for some compelling reason, please be sure to notify the faculty member by e-mail in advance. Course materials (this syllabus, etc.) will be available online. Please be sure to read this entire syllabus carefully, *including the “Helpful Hints”*.

1. The objective of this course is for students to gain exposure to experimental neuroscience research, to develop the ability to communicate scientific ideas effectively, and to hone their critical and listening skills. One primary means for achieving this is for students to attend research seminars (talks) given by visiting scientists on a regular basis. Students enrolled in 493 are expected to get in the habit of attending research seminars; all 493 students should be able to find at least one interesting seminar to view each week.

The usual time of Neuroscience-related seminars this semester will be: 12:00 (noon) Mondays

Neuroscience research seminars (past archived ones & upcoming) are listed at <https://dornsife.usc.edu/neurobiology/seminar-series/>. You may choose an archived seminar given at USC during the last 2-3 years; seminars given at UCLA are usually acceptable also. If you choose a seminar NOT given at USC (Neurobiology or Neuroscience) please have it pre-approved by MOORE ~1 week in advance: send instructor the name and affiliation of the speaker, where the talk took place (with the host's name if possible), and 1-2 sentences on the content/area. Use the guidelines we discussed in our first class to choose an appropriate seminar - the talk must be experimental basic neuroscience. You may also find Neuroscience-related research seminars in Psychology or at Zilkha on HSC.

2. Each 493 student is required to give two oral presentations (“chalk talks” rather than PowerPoints) during the semester with at least two weeks intervening between presentations. Presentations are based on research seminars attended live or viewed on-line. Students will schedule their presentations in the first meeting of the semester when we go over the requirements – bring your calendar. Read “Helpful Hints on p. 2 – adhering to those instructions is a major objective of this course.

3. Course grades are based both on oral presentations and class participation. Each presentation is worth 40% of the grade and class participation is worth 20% of the grade. Note that proactive class participation is essential since an important part of this class is learning to ask questions and exchange ideas freely –it is also extremely important for *esprit de corps*! Students should be prepared to ask at least one question or contribute a relevant comment by the end of each presentation. It will help everyone learn your name a bit more quickly if you precede your question or comment with your name. While grades lower than A- are very rare in this course (after all, you are Honor students), an A is definitely not automatic.

4. Depending on the number of students signed up for the class, we may or may not have extra class time available. If we have class periods when no presentations are scheduled—almost always these will occur at the beginning of the semester--then each student should bring to class an item of “science in the news” that could be the basis of a 5-10 minute discussion. Further instructions will be given in the first class, during which we will go over the general organization of the course and course objectives in detail. The final exam period will be used for 494 thesis presentations, if necessary; alternatively, we will have a full-day symposium on Monday

April 29 for 494 Honors thesis presentations.

5. Students requesting academic accommodations based on a disability are required to register with Disabilities Services and Programs (DSP) each semester (see below, p.3). A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure the letter is delivered to one of the course faculty as early in the semester as possible.

### **Helpful Hints for Oral Presentations in 493**

Start: Prior to the start of your talk, write an abbreviated title of the seminar you attended on the top of the board, along with the name of the speaker and his or her institution. The rest of your talk (and what you write on the board) should be added gradually as you progress. Plan on speaking for a maximum of ~10-11 min so as to leave plenty of time for questions/critiques. Some important guidelines:

1. Keep your mind on the big picture! Frequently speakers are so closely focused on the details that they forget that people in the audience are unlikely to know much about the topic. Remember you are usually trying to explain something that people in the audience know little about. Give an overview at the beginning of the big picture you want to convey: explain the rationale or hypothesis and background (briefly) for the results you are going to describe; say why the specific question being investigated is interesting and important. ***START*** by *piquing the interest of your listeners!*
2. Aim for a well-organized, succinct presentation. Don't try to be comprehensive - it is preferable to concentrate on selected specific results from the talk you attended 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 (in this case, the audience is conversant with fundamental concepts in neuroscience, but typically unfamiliar with the domain of the seminar that you will be presenting). Give a brief, clear exposition of some subset of the results and what they mean. Concentrate on developing a coherent story that engages the interest of your audience. One model is that you are at a scientific meeting and are sitting at the bar explaining the research to a scientist who might be interested in hiring you and you have 10 minutes and a few bar napkins to convey the essential ideas by drawing and explaining items of interest.
3. As indicated above, you will not have time to present the results comprehensively--you will need to be selective. It is a good idea to start organizing your presentation by focusing on what you judge to be the ultimate take-home lesson of your talk, which should include some interesting data, what they mean, and why they are important. This will help constrain the particular results you want to cover. Then back up and think about how your introduction and description of what the researchers did can lead your listeners to the specific results on which you have chosen to focus. Think of this as "reverse engineering" your talk, so that your introduction leads your listeners to the results you will describe.
4. Be prepared – write a short (<1 page) outline in advance if you want some notes (but don't expect to rely on them during your talk). Concentrate on an integrated story line; think about what questions you are hoping to get. ***Give at least one practice talk to friends or lab mates at least 1-2 days before your presentation.*** Remember, you have only 10 minutes in which to convey your story – concentrate on giving specific information (especially experimental results and what they mean) in a user-friendly way.
5. Remember your 493 presentation is a "chalk talk" – so use your writing surface! It's an excellent way to use the power of graphics, such as drawing 2-3 simplified graphs of results. Do not to read from notes. Look up; people will be a lot more interested if you look up and out into the audience.
6. Remember to take a giant (metaphorical) step BACK at the end of your presentation (as at the beginning) – ***FINISH*** by fulfilling the interest of your listeners! Get back to the big picture by linking back to the start of

your talk. 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!

7. Last but not least: try not to say “um”, “like”, “basically” 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. Listeners are never bothered by short silences in a talk – but they tend to be distracted by lots of “ums”!
8. Good luck, and have fun!

**Disabilities.** Students requesting academic accommodations based on a disability are required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure the letter is delivered to the instructor as early in the semester as possible. DSP is open Monday-Friday, 8:30-5:00. The office is in GFS 120 (<https://dsp.usc.edu/>) and their phone number 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://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](http://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](http://policy.usc.edu/scientific-misconduct).

### Support Systems:

*Student Health Counseling Services - (213) 740-7711 – 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*  
[suicidepreventionlifeline.org](http://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](http://engemannshc.usc.edu/rsvp)

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

*Office of Equity and Diversity (OED) | Title IX - (213) 740-5086*

[equity.usc.edu](http://equity.usc.edu), [titleix.usc.edu](http://titleix.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*

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

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.

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

[studentaffairs.usc.edu/bias-assessment-response-support](http://studentaffairs.usc.edu/bias-assessment-response-support)

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

*The Office of Disability Services and Programs - (213) 740-0776*

[dsp.usc.edu](http://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 Support and Advocacy - (213) 821-4710*

[studentaffairs.usc.edu/ssa](http://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](http://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](http://dps.usc.edu), [emergency.usc.edu](http://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](http://dps.usc.edu)

Non-emergency assistance or information.