

**PSYC UN3930 Psychology/Neuroscience Senior Thesis Advanced Research Seminar
Spring 2022
Sch 405 Wednesday 4:10-6:00 p.m.
Professor Nim Tottenham
Office hours: Thursdays 5-6PM in 419E Schermerhorn**

About the Senior Thesis Research Intensive program:

The Psych/Neuro Senior Thesis Advanced Research Seminar is a restructured version of what was formerly the Psychology department's Honors program. This new program is meant for students who have strong interests in psychological/neuroscientific research and are able to participate in the three consecutive semesters (spring - fall - spring) that are required in the program.

For more information on what this Psych/Neuro Senior Thesis Advanced Research program requirements include, please visit the Advanced Research webpage at <https://psychology.columbia.edu/content/psychneuro-senior-thesis-research-intensive>. In addition to working in a research lab and completing an independent research project, students in this program are required to take PSYC UN1920 The How-To's of Research and three semesters of PSYC UN3930 Psychology/Neuroscience Senior Thesis Advanced Research Seminar.

Research goals:

Through participating in independent research projects in their labs, students in this program will focus on:

- Learning big question in psychology and neuroscience
- Learning the scientific literature
- Forming hypotheses, designing experiments, conducting experiments/collecting data using sound and ethical methods
- Analyzing data, using statistical tools, interpreting data, fitting findings into what is already known on the topic.

Seminar goals:

Through participating in the accompanying seminar series, students in this program will focus on:

- Learning to read scientific papers and understand talks
- Learning how to describe scientific studies
- Presenting one's experimental questions, plans and predictions.
- Constructing and presenting work formally.

Outside of class, I can advise on: labs to join; complexity of project/feasibility; graduate school; fellowships.

Additionally, you'll find on courseworks resources including the following: about presenting work; about colloquium reading QuaLMRI, example QuaLMRI, about senior thesis funding, example honors thesis, example honors talks, updated schedule

We will meet in 405 Schermerhorn when there is no colloquium and in 614 Schermerhorn for colloquium (The Colloquium schedule will be published on the department website and the syllabus when it becomes available.).

Things to plan for:

- **(Seniors) Final Papers** – Due to Research Advisors, who will read and grade before end of semester. My advice would be to get this to them in **early April**.
- **(Seniors) Final Presentations 4/29**
- **(ALL) Practice throughout Spring Semester**

- Based on the readings Juniors will need to prepare a **weekly integrative comment** (i.e., based on more than one of the readings). This comment should be a thoughtful comment on the readings; it may be a conceptual or a methodological related issue. You must post this paragraph on courseworks by 10am on the Wednesday before class.
- By early March, Seniors will submit their **thesis outline**. Students will receive feedback for revisions prior to writing the final thesis.
- **Group paper presentations:** In the second week of class, we will divide into groups (~2/group). Each group will be responsible for presentation of colloquium speaker papers. Each week, a team of 2-3 students will be responsible for leading class discussion based on the readings and the weekly integrative comments posted on courseworks. Each team must coordinate their plans in advance, including identification of the three most relevant weekly comments across all student weekly integrative comment submissions. The teams must submit an outline of the summary of their review and questions to each of the instructors by e-mail by 7pm on Sunday before the class.

Evaluation

- 50% Research (from Lab PI)
- 5% attendance
- 10% participation
- 10% Group paper presentations
- 10% In-class presentations of research plans
- 15% Seniors (thesis outline)/Juniors (weekly integrative comments)

Schedule (representative from a previous year)

1/22 – Housekeeping (2/group; pick Team A & B for senior practice) & Intro & Nim presents.

1/29 – Speaker: Ken Paller

2/05 – Discussion for Jeff Mogil (15 min); (**Seniors present** current state of research (10 minutes/ea); **juniors discuss** present state of research.)

2/12 – Speaker: Jeff Mogil

2/19 – Discussion for Mary A. Peterson (15 min) ‘**Team A**’ **Seniors practice** (10 minutes/ea)

2/26 – Speaker: Mary A. Peterson

3/04 – Discussion for Damien Fair (10 min) & Christine Cha (10 min) & ‘**Team B**’ **Seniors practice** (10 minutes/ea)

3/11 – Speaker: Damien Fair

3/25 – Speaker: Christine Cha

4/01 – (**All Seniors practice** (10 minutes/ea) & **Juniors** present Intro/Methods)

4/08 – Mamie Phipps Clark & Kenneth B. Clark Distinguished Lecture: Jelani Cobb Speaker

4/15 – Discussion for Ilia Karatsoreos (15 min); **All Seniors practice** (10 minutes/ea) & **[ALL] ask research advisors for grades**

4/22 – Speaker: Ilia Karatsoreos

4/29 – Senior Final Presentations

Please Note: This schedule is a sample schedule from a previous year, the schedule for this semester will be different.

Resources and Policies:

Disability Services: In order to receive disability-related academic accommodations, students must first be registered with Disability Services (DS) . More information on the DS registration process is available online at www.health.columbia.edu/ods. Faculty must be notified of registered students’ accommodations before exam or other accommodations will be provided. Students who have, or think they may have, a disability are invited to contact Disability Services for a confidential discussion at (212) 854-2388 (Voice/TTY) or by email at disability@columbia.edu.

Writing Center: We encourage you to take advantage of the writing instruction that is available to all students at the [Writing Center](#). Writing consultants will meet with you at any stage in the writing process for your research proposals.

The Ombuds Office: When students encounter problems that they feel they cannot discuss with their professors, they may, instead, turn to the University Ombuds Office -- <http://ombuds.columbia.edu> -- for information, clarification of University policies, and confidential advice. The Ombuds Officer may refer students to other offices for further assistance or engage in informal mediation at the request of students. The Ombuds Officer does not have the authority to conduct formal investigations.

Office of Equal Opportunity and Affirmative Action: When students believe that they have been the victims of discrimination or sexual harassment by faculty, they may seek assistance from the Office of the Associate Provost for Equal Opportunity and Affirmative Action -- <http://eoaa.columbia.edu>. As described in the University's Policy Statement on Discrimination and Sexual Harassment, the Associate Provost is empowered to conduct investigations of their complaints, with certain exceptions, as well as provide confidential advice and engage in informal mediation. The Associate Provost may exercise those responsibilities herself or delegate them to a designee. If at any time a complaint is filed with a governmental agency or court, the University procedures must cease immediately.

Academic integrity: The intellectual venture in which we are all engaged requires of faculty and students alike the highest level of personal and academic integrity. As members of an academic community, each one of us bears the responsibility to participate in scholarly discourse and research in a manner characterized by intellectual honesty and scholarly integrity.

Scholarship, by its very nature, is an iterative process, with ideas and insights building one upon the other. Collaborative scholarship requires the study of other scholars' work, the free discussion of such work, and the explicit acknowledgement of those ideas in any work that inform our own. This exchange of ideas relies upon a mutual trust that sources, opinions, facts, and insights will be properly noted and carefully credited.

In practical terms, this means that, as students, you must be responsible for the full citations of others' ideas in all of your research papers and projects; you must be scrupulously honest when taking your examinations; you must always submit your own work and not that of another student, scholar, or internet agent.

Any breach of this intellectual responsibility is a breach of faith with the rest of our academic community. It undermines our shared intellectual culture, and it cannot be tolerated. Students failing to meet these responsibilities should anticipate being asked to leave Columbia.

For more information on academic integrity at Columbia, students may refer to the *Columbia University Undergraduate Guide to Academic Integrity*: <http://www.college.columbia.edu/academics/academicintegrity>

Counseling and Psychological Services: [The Counseling and Psychological Services](#) (CPS) Center at Columbia (Lerner Hall, 8th floor) is a safe place for students to talk about any concerns they may have. CPS offers free and confidential therapy and psychiatric care, which is provided in a safe environment where students can address issues that may be keeping them from attaining their academic goals. For appointments, call (212) 854-2878; For after-hours assistance, call (212) 854-9797 or contact Public Safety at (212) 854-5555.