

## PSYC 8905: Special Problems in Brain and Cognition

Fall 2026

### Instructor Information

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Instructor: Hsiao-Wen Liao

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### General Course Information

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Special Problems in Brain and Cognition serves as dedicated, supervised research time for doctoral students to work directly under the faculty listed. Students will conduct empirical research with an aim to convert the project into a publication.

### Course Learning Outcomes

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Upon successful completion of this semester, you should be able to:

- **Formulate** and refine testable hypotheses that address meaningful theoretical or methodological gaps in the I-O psychology literature.
- **Execute** critical phases of the empirical research process, which may include experimental design, psychometric validation, or large-scale data collection.
- **Apply** appropriate statistical or computational methods to analyze complex organizational data.
- **Navigate** the ethical and logistical requirements of human subjects research within the Institute.
- **Translate** raw scientific findings into professional deliverables, such as academic conference submissions, grant proposals, or journal-ready manuscripts.

### Required Course Material

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There is no required textbook for this course.

### Grading Policy

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Because this course functions as individualized research hours rather than a traditional seminar, your grade is not determined by a weighted point system or standardized exams. Instead, your evaluation is based holistically on your consistent progress, scientific independence, and the completion of agreed-upon research goals.

At the beginning of the semester, we will collaboratively outline the specific deliverables expected of you based on the current stage of your research (e.g., submitting an IRB protocol, executing a data collection phase, running statistical analyses, or drafting a conference submission).

Your final grade will reflect:

- **Consistent Progress:** Steady, demonstrated momentum on your research project throughout the semester.
- **Professional Engagement:** Active participation, accountability, and preparedness in our weekly supervisory meetings and broader lab discussions.

- **Fulfillment of Deliverables:** The successful completion and overall quality of the specific research outputs we agreed upon at the start of the term.

## Course Policies

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### **Supervisory and Lab Meetings**

Your "attendance" in this course is defined by your professional engagement with the lab. You are required to attend and actively contribute to all scheduled lab meetings and our 1-on-1 supervisory sessions. You are expected to update your progress as discussed.

### **Scientific Independence and Accountability**

Doctoral research is not about waiting for the next assignment; it is about taking ownership of the scientific process. You are the project manager for your research. It is your responsibility to anticipate administrative delays (like IRB review times), manage your data collection schedules, and proactively communicate if you need methodological support.

### **Professional Absences**

Absences required for critical academic milestones, such as presenting at a conference, attending cross-institutional research meetings, or conducting field data collection, are expected and supported. If you need to miss a scheduled lab or supervisory meeting due to illness or a professional obligation, you must communicate this in advance and provide a written update on your weekly progress to ensure your project does not lose momentum.

### **Accommodations for Students with Disabilities**

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

### **Student-Faculty Expectations Agreement**

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. [The Student-Faculty Expectations](#) articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class

### **Campus Resources for Students**

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In your time at Georgia Tech, you may find yourself in need of support. Below you will find some resources to support you both as a student and as a person.

#### **Academic support**

- Center for Academic Success <http://success.gatech.edu>
  - 1-to-1 tutoring <http://success.gatech.edu/1-1-tutoring>
  - Peer-Led Undergraduate Study (PLUS) <http://success.gatech.edu/tutoring/plus>
  - Academic coaching <http://success.gatech.edu/coaching>

- Residence Life's Learning Assistance Program <https://housing.gatech.edu/learning-assistance-program>
  - Drop-in tutoring for many 1000 level courses
- OMED: Educational Services (<http://omed.gatech.edu/programs/academic-support>)
  - Group study sessions and tutoring programs
- Communication Center (<http://www.communicationcenter.gatech.edu>)
  - Individualized help with writing and multimedia projects
- Academic advisors for your major <http://advising.gatech.edu/>

## Personal Support

### Georgia Tech Resources

- The Office of the Dean of Students: <http://studentlife.gatech.edu/content/services>; 404-894-6367; Smithgall Student Services Building 2<sup>nd</sup> floor
  - You also may request assistance at [https://gatech-advocate.symlicity.com/care\\_report/index.php/pid383662?](https://gatech-advocate.symlicity.com/care_report/index.php/pid383662?)
- Counseling Center: <http://counseling.gatech.edu>; 404-894-2575; Smithgall Student Services Building 2<sup>nd</sup> floor
  - Services include short-term individual counseling, group counseling, couples counseling, testing and assessment, referral services, and crisis intervention. Their website also includes links to state and national resources.
  - *Students in crisis may walk in during business hours (8am-5pm, Monday through Friday) or contact the counselor on call after hours at 404-894-2204.*
- Students' Temporary Assistance and Resources (STAR): <http://studentlife.gatech.edu/content/need-help>
  - Can assist with interview clothing, food, and housing needs.
- Stamps Health Services: <https://health.gatech.edu>; 404-894-1420
  - Primary care, pharmacy, women's health, psychiatry, immunization and allergy, health promotion, and nutrition
- Veteran's Resource Center: <http://veterans.gatech.edu/>; 404-385-2067
- Georgia Tech Police: 404-894-2500