

Introduction to Cognitive Science

Spring 2027

Course Information

Course Prefix and Number: CS3790

Credit Hours: 3

Instructor: Varma, Sashank

Course Description

This course will offer a multidisciplinary perspective on cognitive science. These disciplines include computer science, psychology, neuroscience, linguistics, and philosophy. This course will utilize electronic readings ranging from textbook chapters, recent reviews of scientific literatures, and seminal papers from multiple fields to ground the lectures. Students will be expected to attend all lectures, keep up with the readings, write weekly discussion board posts, write weekly reflection papers about the weekly (i.e., Wednesday) readings, complete a short assignment, and write a longer paper on a cognitive science topic of their choice.

Course Learning Outcomes

By enrolling in this course, students will:

1. Gain an understanding of cognitive science, its component disciplines and how they relate to one another, and a sense of how cognitive science connects to your own field.
2. Better appreciate the role of theory and models in science.
3. Be exposed to a range of empirical methods.
4. Experience reading scientific papers.
5. Develop the ability to engage scientific arguments on their own, without relating them to your own opinions or personal experiences.
6. Learn how to write about scientific research – to understand it, synthesize across studies, and identify limitations.
7. Gain deep knowledge of your final paper topic.

Required Course Materials

The readings for this course will come from a variety of sources. There will be many book chapters and journal articles. Some will be classics in the various fields that comprise Cognitive Science; others will be general overviews, and a few will be recent research papers. All will be available on the Canvas site.

Grading Policy

Grades will be assigned based on the following cut-offs.

- A: percentage ≥ 90
- B: $90 > \text{percentage} \geq 80$
- C: $80 > \text{percentage} \geq 70$
- D: $70 > \text{percentage} \geq 60$
- F: $60 > \text{percentage}$

Note that your final percentage will *not* be rounded up. For example, a 79.6% will be assigned a grade of C.

Attendance Policy

Students are expected to attend every lecture. In particular, for weeks 2-11 of the course, there will be quizzes administered during the Monday lectures. These will be paper-and-pencil assessments and students must be physically present to complete them.

Academic and Research Honesty/Integrity Statement

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review the [Student Code of Conduct](#) and the [Academic Honor Code](#), especially [Appendix A: Graduate Addendum to the Academic Honor Code](#).

Students are expected to perform research in an ethical and responsible manner. All Doctoral and Master's Thesis students are required to take the [Responsible Conduct of Research training](#), and it is expected that students abide by the principles taught in that training while performing research for this thesis course.

Allegations of scientific or scholarly misconduct are handled in accordance with the procedures outlined by the [Policy for Responding to Allegations of Scientific or Other Scholarly Misconduct](#).

Core IMPACTS

Not applicable.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) 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.

Expectations of Advisors and Advisees

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 [Expectations of Advisors and Advisees](#) articulates 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.