

PSYC2760: Human Language Processing

GENERAL INFORMATION

Instructor: Prof. Anna (Anya) Ivanova
Credits: 3
Prerequisites: Introduction to Psychology or permission of instructor

In this class, we will discuss the cognitive and neural mechanisms that allow humans to communicate using language. We will examine how our brains process information about words, sentences, and entire narratives; trace how speech, writing, and sign are converted into thoughts (and vice versa); trace language learning in infants and language impairment in disease; compare language processing in those who speak one language vs. many; and tease out the relationship between language and the rest of cognition.

AFTER TAKING THIS CLASS, YOU WILL BE ABLE TO

- Discuss language processing from a cognitive perspective
- Explain how language fits into the broader landscape of the human mind and brain
- Understand how different scientific methodologies (behavioral experiments, neuroimaging, patient studies, stimulation techniques, and computational models) contribute to our understanding of language in the mind and brain
- Develop/strengthen your ability to critically evaluate empirical evidence, including interpreting scientific plots, stating the main takeaway of a study, and discussing the limits of insights from individual scientific experiments

CLASS FORMAT

Lectures + in-class activities

READINGS

Language in Mind: An Introduction to Psycholinguistics by Julie Sedivy (2nd edition).
E-book version is ok. If you are having difficulties purchasing the text, please contact the instructor or the TAs. In addition to the textbook, you will occasionally be assigned additional readings.

ASSIGNMENTS

1. Weekly quizzes (2% each; 20% total)

Every week, we will do a short in-class quiz covering the main concepts from the previous week. You will be able to drop 1 quiz with the lowest grade.

2. Take-home assignments (10% each; 40% total)

There will be 4 take-home assignments where you will be asked to interact with the models discussed in class & write up a short report.

Group work policy: *you can work on assignments together, but each student must submit an individually written report (no copying or providing the same written responses!). You should also list all members of your team in the report.*

3. Midterm (20%)

The midterm will be in class, open-book format. Use of the internet, notes, etc. is allowed; communicating with other people and using AI tools like ChatGPT is not allowed.

4. Final exam (20%)

The final exam will take place during the final exam period and will be non-cumulative (covering the content discussed after the midterm). It will also be open book. Use of the internet, notes, etc. is allowed; communicating with other people and using AI tools like ChatGPT is not allowed.

5. Extra credit (8%)

We will provide extra credit opportunities throughout the semester for up to 8% of the total grade.

GRADING

Your end-of-semester letter grade will be determined by your overall points score, as follows:

90-100:	A
80-89.99:	B
70-79.99:	C
60-69.99:	D
below 60:	F

ATTENDANCE

You are expected to attend each lecture in person. If you are sick or have other extenuating circumstances, email the TAs before class and use the Zoom link to attend the class remotely / watch the recording on Canvas if it is available. Lecture recordings are not guaranteed. You are expected to know the content of the lectures; not all of the information we cover is explicitly stated on the slides.

LATE SUBMISSION POLICY

Quizzes: the quizzes are only available during quiz periods in class. If you have extenuating circumstances preventing you from attending a class with a quiz, you can request to reschedule the quiz. If you have a single absence (either unexcused or excused), you can always drop that missing quiz score.

Assignments: assignments submitted a day late will have 10% deducted from their final score. Assignments submitted 2 days late will have 20% deducted, and so on.

CHATBOT POLICY

You may use ChatGPT or similar AI tools, but you always have to (a) verify the output yourself, (b) edit the output instead of simply copying and pasting, and (c) ***report the use of a chatbot for a given question***. Assignments/questions that have been fully completed by an AI chatbot with no input from the student will receive 0. Assignments that have been completed with the use of an AI chatbot but the use of the bot was not reported will receive a 0. Be wary – chatbots can easily produce irrelevant or wrong responses, so think twice before deciding that you need to use them.

MEDICAL OR PERSONAL CIRCUMSTANCES IMPACTING ASSIGNMENTS AND EXAMS

Personal and medical issues can make it hard to focus on academics. We are happy to work with you in whatever way is most appropriate to your individual circumstances to help ensure that you are able to achieve your best performance in the class while maintaining your health, happiness, and well-being.

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at 404.894.2563 or their website as soon as possible, to discuss your needs and to obtain an accommodations letter. Then, reach out to us to discuss your learning needs.

ACADEMIC INTEGRITY

We expect you to complete your assignments, quizzes, and exams individually (unless working in a group for take-home assignments, in which case members of the group should be listed in the report). You may not cheat, copy responses from others or the web, or enable such behavior. If you are struggling on an assignment or are otherwise worried about your performance in the

course, please come see the instructors or the TA. For more information on the Honor Code, visit the OSI website.

USE OF MOBILE DEVICES

Students are required to bring their laptops to class to complete quizzes and exams. The instructors and TAs will monitor your screens to ensure adherence to guidelines (no use of chatbots nor communication with others). Headphones and cell phones are not allowed during quizzes and exams.

Use of laptops and tablets for note-taking during lectures is allowed. You are allowed to use these notes during quizzes and exams.

OTHER

Student-Faculty Expectations

This course follows the student-faculty expectations established by Georgia Tech. See the full description here: <https://catalog.gatech.edu/rules/21/>

This is a Core IMPACTS course that is part of the Social Sciences area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I understand human experiences and connections?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will effectively analyze the complexity of human behavior, and how historical, economic, political, social, or geographic relationships develop, persist, or change.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Intercultural Competence
- Perspective-Taking
- Persuasion