# **Neurolinguistics**

#### Fall 2024

Welcome to Neurolinguistics! The Fall 2024 course information and materials are below. Course materials from previous semesters are archived here.

### **Syllabus**

Course Description: Neurolinguistics is a seminar on language and the brain. For the first few weeks, you will build a foundation of knowledge, first on how brains work (neurons, networks, and anatomy) and later on the methods researchers use to study language in the brain. The remainder of the course will explore the literature on different topics in language and the brain, including various levels of linguistics (phonology, morphology, syntax), acquisition, evolution, signed languages, and more.

**Prerequisites**: This course is open to all graduate students and upper-level undergraduates. No specific background in neuroscience or linguistics is necessary to participate in the course. However, this is an advanced seminar-style course; students looking for a lecture formart will not enjoy this course.

Instructor: Dr. Katie Schuler (she/her)

• You can call me Katie

Seminars: Thursday at 1:45pm in TBD

Office Hours: The linguistics department is located on the 3rd floor of 3401-C Walnut street, between Franklin's Table and Modern Eve.

• Katie Schuler: TBD in 314C

**Requirements**: This is an advanced STEM seminar. Below are the major requiements, but please read the tips for seminars to understand further:

- Reading prep: Each week, you will be responsible for preparing for the discussion by completing the assigned reading. As you read, you are responsible for asking questions and beginning the discussion of the paper in our reading annotation tool, Perusall.
- **Discussion leader**: Several times throughout the semester (but not every week), you will serve as discussion leader for a paper with one or two other students. As discussion leader, your group will be responsible for presenting the paper, including summarizing (motivation, research questions, approach, and findings) and leading a discussion of the work.
- Final paper: You will select a paper of interest to you (within the bounds of language and the brain) and write a research analysis of the work (in the form of a nature "News & Views" paper; example here). There are a few checkpoints leading up to this final paper (including peer review) to help you make progress.

#### Grading:

- 30% Participation in discussion (including reading prep in Perusall)
- 40% Discussion leader
- 30% Final paper (including several check-points throughout the semester: paper selection, outline, drafts, and peer review)

**Extensions**: For assignments related to the final paper, extensions of up to 1 week will be granted for any reason. Beyond that, you can turn in any missed writing assignment for half-credit (50%).

Accommodations: I will support any accommodations arranged through Disability Services via the Weingarten Center and to make alternate arrangements when class conflicts with a religious holiday. Please notify me as soon as possible if you require accommodations.

Extra credit: There is no extra credit in the course. However, students can submit any missed reading prep by the end of the semester for half credit (50%). To ensure fair treatment, all students will receive a 1% "bonus" to their final course grade: 92.54% will become 93.54%.

**Support**: Asking for help is a sign of strength! I hope you'll reach out to me if you need help (acamdeically or otherwise). I also want you to be aware of Penn's Academic & Wellness Resources

#### Resources

In addition to our course website, we will use the following:

- canvas- for posting grades
- perusall for reading annotations
- ed discussion for announcements and questions

Other helpful materials and resources:

• tips for seminars

Please consider using these Penn resources this semester:

- Weingarten Center for academic support and tutoring.
- Wellness at Penn for health and wellbeing.

## Final paper checkpoints

• Checkpoint 1: Topic selection

## Schedule



#### ⚠ Under Construction

This is the first draft of the schedule. You should see your name 3 times, mostly on topics you expressed an interest in.

Week	Date	Topic & Discussion Leaders	Due
1	Aug 29	Getting started Katie (Instructor)	
2	Sep 5	CNS, neurons, and methods Katie (Instructor)	
3	Sep 12	Perspective Krakauer et al (2017): Chloe, Dillon, Erica Embick & Poeppel (2015): Esther, Mahir, Sophia	
4	Sep 19	Networks Esther, Jo, Na, Mahir, Sophia, Jaehyuk	Topic selection (Thurs)
5	Sep 26	Phonemes & Syntax Daniel, Dillon, Greg, Ninjin, Tali	
6	Oct 3	Fall break (no class)	Outline due (Tues)
7	Oct 10	Acquisition I Carey, Leann, Katie, Karis, Ninjin, Tali, Tess, Na	
8	Oct 17	No class (Katie @ conference)	Peer review I (Thurs)
9	Oct 24	<b>Acquisition II</b> Alyssa, Chloe, Daniel, Dillon, Esther, Greg, Jo, Kamelija	

Week	Date	Topic & Discussion Leaders	Due
10	Oct 31	Bilingualism I Alyssa, Erica,	
		Kamelija, Sophia, Daniel, Greg	
11	Nov 7	Symposium (Zoom):Neural	Paper draft
		Coding in Speech, Language	due (Thurs)
		and Cognition	,
12	Nov 14	Bilingualism II Carey, Chloe,	
		Leann, Katie, Na, Karis, Jo	
13	Nov 21	Sign language Carey, Leann,	
		Katie, Karis, Tali, Tess, Jaehyuk	
14	Nov 28	Thanksgiving break (no class)	Peer Review
			II (Tues)
15	Dec 5	Evolution Alyssa, Erica, Ninjin,	
		Kamelija, Tess, Mahir	
16	Dec 9	No class	
17		Final paper (TBD)	