Abstract

This advanced seminar focuses on the state of the art and on possible future directions for the cognitive science of language.

Some of the material is complex and technical, requiring prior exposure to concepts from linguistics and computational cognitive science. It is aimed at advanced undergraduate students, as well as graduate students from psychology, neurobiology, computer science, and other cognitive sciences.

The readings consist of about 50 papers from the primary literature (listed below and available on the course Blackboard site as a zipped collection of PDFs). Chapter 7 from Computing the Mind: How the Mind Really Works (Oxford University Press, 2008) serves as a general background and introduction. Additional papers and changes to this syllabus may be occasionally posted on Blackboard as needed.
Administrative details

Learning objectives

The students will be acquainted with the latest thinking and research concerning certain aspects of language, with a special focus on cognitive-computational theories and models.

To get credit

- **Read** (20% of the course grade). For each week, there’s a list of references (all the papers are also listed at the end of the syllabus, alphabetically by first author). These include primary readings (required) and other readings (optional, but highly recommended).

  To be able to follow and participate in the discussion in class, read each week’s materials *ahead of the meeting*. To get credit for reading, before each class submit (via Blackboard) a question about the weekly assignment (1 or 2 points each; at least 10 questions must be turned in).

- **Attend**. Attendance will be monitored; missing a class will result in a penalty on the final grade (except when approved ahead of time by the instructor).

- **Participate** (20%). Contribute to the discussion, even if you are not the presenter. Following each class, submit a question or comment regarding some issue(s) that came up in the discussion (1 or 2 points each; at least 10 questions must be turned in).

- **Present** (40%). Prepare a presentation and lead the discussion at one of the meetings. Arrange to meet with the instructor ahead of the class to discuss your plans and preparation.

- **Write** (20%). Compose a final essay; present it briefly (5 min) at the last class meeting; and submit it (in pdf, via email to the instructor) by noon on Monday, May 15. Detailed instructions will follow.

Code of integrity

The Cornell University [code of academic integrity](#) applies.

Students with disabilities

If you have a disability-related need for reasonable academic adjustments in this course, provide the instructor with an accommodation letter from Student Disability Services. Meeting with the instructor during office hours will help ensure confidentiality. Students are expected to give two weeks notice of the need for accommodations. If you need immediate accommodations, please arrange to meet with the instructor within the first two weeks of classes.
Preliminaries and overview — 1/30

1/30  – a brief theory-neutral view of language [15, ch.7]
– what is language for? [34]
– Chomsky’s legacy [17].
– language and other complex behaviors [16] [finish reading this by week 11].

Primary readings


Other readings

Theme I: the state of the art — (A) the formalist approach [2/6, 2/13]

2/6 theory [43, 26, 19, 49, 51]

2/13 methodology [44, 26, 2, 27]; evidence [40, 3, 47, 9]

Primary readings


Other readings


Theme I: the state of the art — (B) the cognitive approach [2/27, 3/6]

2/27 theory [20][31][32][23][13][33]
3/6 evidence [24][55][8][39][38][5]

Primary readings


Other readings

Theme I: the state of the art — (C) the empirical/computational approach [3/13, 3/20]

3/13 results [50] [48] [4]

3/20 evidence [36] [1] [7] [29]

Primary readings


Other readings

Theme II: critique — 3/27, 4/10, 4/17

3/27 grammaticality/acceptability [25, 46, 45, 11, 35]

4/10 performance and individual differences [21, 10, 12, 54]

4/17 real language [37, 14, 52, 22, 53]

Primary readings


Other readings


Theme III: a fresh start — 4/24, 5/1, 5/8

4/24  language and other behaviors [28,16]

5/1  computational approaches [56,18,6,41,42,16]

5/8  summary [17]

Primary readings


Other readings

References


