

# 2020FA - PROSEM COG SCI 16:185:500:01

**Course:** Proseminar in Cognitive Science (185:500, Index number 11801)

**Instructors:** Jacob Feldman and guest lecturers

**Class time and place:** by Zoom, Tuesdays 9:30am-12:10pm. The Zoom link will be available in Announcements before the first class.

**Topic:** Cognitive science is the interdisciplinary study of the mind and brain, encompassing aspects of cognitive psychology, computer science, linguistics, philosophy, and other fields. This course provides an introduction to cognitive science as studied at Rutgers. In a series of lectures, Rutgers faculty members connected to the Rutgers Center for Cognitive Science (RuCCS) will introduce students to their areas of specialization, possibly with emphasis on their own research.

## Graded assignments:

Weekly reading response (40% of grade): Each week, students are asked to write a paragraph-long comment or question in response to the week's assigned reading. Comments should be posted on each week's "Assignment" on Sakai. Comments and questions should demonstrate familiarity and mental engagement with the week's reading.



Papers (30% each): Students are asked to write two papers (each 10 pages double-spaced), due respectively Oct. 27 and Dec. 8.

For each paper, the assignment is write an essay on the connection between two of the lecture topics, comparing and contrasting some aspect of the material presented. For Paper 1, choose two topics from Sept. 15 - Oct. 20, and for Paper 2, choose two topics from Oct. 27 - Dec 1). For example, for Paper 1 you might choose to consider similarities and differences between how some aspect of visual perception is studied by psychologists (lecture of Sept. 15) and philosophers (lecture of Sept. 22). For Paper 2, you might choose to compare what can be learned about cognition from development (Nov. 17) vs. disorders of cognition (Nov. 10).

## Tentative schedule of topics and readings

Readings for each week are linked from the lecture topic.

- Sept 1: Introduction [no reading]

- Sept 8: MONDAY CLASSES, no class
- Sept 15: Meeting 1: Melchi Michel (Psychology): Human perception
- Sept 22: Meeting 2: Susanna Schellenberg (Philosophy): Philosophy of perception
- Sept 29: Meeting 3: [Jacob Feldman \(Psychology\): Bayesian models of perception and cognition](#)
- Oct 6: Meeting 4: Kasia Bieszad (Psychology): Neuroscience of audition
- Oct. 13: Meeting 5: [Dave Kleinschmidt \(Psychology\): Cognitive neuroscience of phonology](#)
- Oct 20: Meeting 6: Karin Stromswold -(Psychology): Language acquisition, neuroscience of language
- Oct 27: Meeting 7: [Mark Baker \(Linguistics\): Syntax](#)
- Nov. 3: Meeting 8: Paul Pietroski (Philosophy): Philosophy of language
- Nov. 10: Meeting 9: Anna Konova (Psychiatry): Disorders of cognition
- Nov. 17: Meeting 10: Jenny Wang (Psychology): Cognitive development
- Nov. 24: Meeting 11: Kristin Dana (Computer Engineering): Social robotics Note: Thanksgiving week but normal schedule
- Dec. 1: Meeting 12: (Computer Science): Mubbasir Kapadia: Artificial agents
- ▶ Dec. 8: Meeting 13: John McGann (Psychology): Neuroscience of perception