

16:185:500 Proseminar in Cognitive Science Fall 2016

SYLLABUS

Instructors: Brian P. McLaughlin (brianmc@rci.rutgers) and guest lecturers

Classroom: Psychology Building Room A139, Psychology Addition, Busch Campus

Time: Tuesdays, 9:30am to 12:00pm

Emails: Prosem@ruccs.rutgers.edu

Purpose of the Course:

The Proseminar in Cognitive Science is a required course for graduate students who wish to obtain a *Certificate in Cognitive Science* on graduation. (See “Certificate” on the RuCCS website for the requirements.) The seminar has two main aims. The first is to introduce students to a number of the core areas of Cognitive Science. The second is to offer students a brief view of the research pursued by a number of members of the Center for Cognitive Science. There will be three main topics in the course: (1) perception, (2) language, and (3) cognition. There will be some recurring themes, one of which is whether the human cognitive system is best viewed as a kind of computational system.

Requirements:

1. Answers to questions about the readings: The readings for each class will be downloadable from the Sakai website for the course and from a link on the RuCCS home page under “RuCCS courses.” (Sakai is the Rutgers course management system: <https://sakai.rutgers.edu>.) Each week, three questions about the readings for the upcoming class will be posted on the Sakai website 6 days before the class. (There will be no readings for the first class.) Students are required to answer two of the three questions. Each answer should be a maximum of 500 words. The answers are due by 9pm the day before each lecture (and so on Mondays). Unexcused late answers will receive a grade reduction. The answers should be emailed to brianmc@rci.rutgers.

2. Attendance: Attendance is mandatory. No more than two excused absences will be permitted. Additional absences will result in a grade reduction.

3. Lab Tour Day: A day will be scheduled during the university’s final exam period for a tour of some of the labs at the Cognitive Science Center.

Grade: Grades will be based mainly on the answers to the questions about the readings. But attendance and class participation will also be taken into account.

Course Schedule

Perception:

Sept 6 Brian McLaughlin (Philosophy): Marr’s Three Levels and the Inverse Optics Problem

Sept 13 Manish Singh (Psychology): Bayesian Vision

Sept 20 Jacob Feldman (Psychology):

Sept 27 Francis Egan (Philosophy): The Moon Illusion

Oct 4 Thomas Papathomas (Director of the Vision Lab): Visual Illusions

Language:

Oct 11 Mark Baker (Linguistics): Syntax

Oct 18 Simon Charlow (Linguistics): Introduction to Issues at the Syntax/Semantics Interface

Oct 25 Bruce Tesar (Linguistics): Optimality Theory

Nov 1 Karen Stromwold (Psychology): Intro to Language Acquisition/Learnability.

Cognition:

Nov 8 Pernille Hemmer (Psychology): Memory

Nov 15 Alan Leslie (Psychology): Cognitive Development

Nov 22 To be announced.

Nov 29 Brian McLaughlin (Philosophy): LOT/Connectionism debate

Dec 6 Gretchen Chapman (Psychology): Judgement and Decision Making

Lab Tour day to be announced

Students are encouraged, but not required, to attend the RuCCS Lecture Series on Tuesdays from 1-2:30pm, if their schedules permit.