

185:412:01 Advanced Topics II: Perception in a variable world

Meets: Monday and Thursday, 12-1:20pm in ARC-207

Prereqs: 01:185:201 Cognitive Science: A Multidisciplinary Introduction

Instructor: Dave Kleinschmidt (dave.kleinschmidt@rutgers.edu)

Office hours: Monday 2-3pm, Psychology 213

Course description

Perception often seems to be a stable, fixed process, but in reality it is constantly in flux, even for adults. In this course we will explore adaptation, perceptual learning, and other dynamic aspects of perception, from the perspective of brain, behavior, and computation. We will focus on the extent to which the adaptability of perception reflects the dynamic nature of the world. This is an exciting area of active research, many open questions, and lots of room for debate.

This course is **discussion-based**, and we will explore the **primary scientific literature** together.

Objectives

First, reading scientific literature requires that you go outside your comfort zone to absorb new information. One of the main goals of this course is to develop skills to read and extract information from papers that you might not fully understand, and to formulate good follow-up questions to fill in gaps of your understanding.

Second, cognitive science is the science of the *mind*, and there are many ways to formulate, ask, and answer questions about the mind. Another goal of this course is to become fluent in different “levels of analysis”, and viewing the same behaviors and data from different perspectives.

Assignments

Class participation: 20%

Because this is a small seminar, participation in class discussions is **critical**. Come to class prepared to discuss the week's readings.

Weekly discussion questions: 20%

Due: 10am each Monday (first one due **September 10**)

1-3 questions (less than 500 words total) for discussion or clarification from the readings. We'll use these to guide our discussion, and to prepare for your response papers. Submit on Sakai. Graded on a complete/incomplete/missing scale.

Weekly response papers: 30%

Due: 6pm each Wednesday (first one due **September 12**)

500-1000 word paper on the week's readings. We'll discuss possible topics during the preceding Monday meeting. Submit on Sakai.

Final paper: 30%

Due: during exam period

Topic TBA.

Schedule of readings: TBA

There is no textbook. All readings will be posted to the Sakai site the Monday before we'll start discussing them. The first class where we'll discuss readings is September 10, so readings for that class will be posted no later than September 3.

Be sure to read all of the week's readings **before class each Monday**.

Class policies

Absences and missed assignments

Because this is a discussion class, It is very important that you come to each class meeting. There will be no slides or notes. If for some reason you absolutely need to miss a class meeting, please contact me as soon as possible and we'll make alternative arrangements to make up for missed discussion questions/response papers.

You can miss **one** response paper without penalty. If for some reason you won't be able to complete more than one, please get in touch with me as soon as possible.

Laptops in class

Laptop use during class is permitted so that you don't need to print out the readings and your notes if you don't want to. However, it's very important that you be not only physically present but also *mentally* and *socially* engaged during class. Our time together during class meetings is precious and if you choose to distract yourself from the discussion you're depriving your classmates of your engagement and perspective.

Plagiarism and academic honesty

If you feel you are struggling and unable to complete the coursework up to your standards, please please please talk to me before you consider plagiarizing. Rutgers has very strict policies about plagiarism and academic integrity with very little tolerance for any sort of cheating. Please be sure you understand these policies (<http://academicintegrity.rutgers.edu/academic-integrity-policy/>) and consider viewing the interactive tutorial at:

<http://library.camden.rutgers.edu/EducationalModule/Plagiarism/>

Accommodation of disabilities

I'm happy to work with you and the Office of Disability Services to accommodate any disabilities. Please follow the ODS procedures here: <http://ods.rutgers.edu/students/registration-form>