

Syllabus

Cognition and Decision Making

01: 185: 301

Logistics

- Lecture: WED, 10:20AM-1:20PM, ZOOM (IF SYNCHRONOUS)
- Recitations:
 - SECTION 1, THURS 10:05AM–11:00AM via Zoom (will be synchronous)
 - SECTION 2, THURS 1:25PM-2:20PM via Zoom (will be synchronous)
- Professor: DR. MARY RIGDON
 - Email: mrigdon@rutgers.edu
 - Office Hours: TBA & BY APPT
- Teaching Assistant: JOSEPH SOMMER
 - Email: js2409@scarletmail.rutgers.edu
 - Office Hours: MONDAYS 3-4PM & BY APPT

An Important Note from Snoop Dogg on the Syllabus

[Snoop Dogg says “Read the syllabus!”](#)

Core Curriculum

Successfully completing this course helps meet one of the Core Curriculum requirements. “Quantitative and Formal Reasoning” goal (QQ) — you will formulate, evaluate, and communicate conclusions and inferences from quantitative information.

Course Description

The subjects of reasoning and decision-making provide a means of exploring a number of issues central to the field of cognitive science. Reasoning is the ability to go beyond the

information given in a situation to figure out what is going on. Decision making is the ability to select a course of action from among a set of possibilities. Understanding how people act helps us to understand fundamental problems in cognitive science such as whether people tend to act rationally. In addition, understanding how people think and decide in general can make us as individuals better reasoners and decision makers. This course will address a range of topics, including judgment and decision making, individual choice, behavioral game theory, cooperation and altruism, among others. This course counts for 4 credits.

Course Objectives

Upon successful completion of the course, students will:

- Appreciate the interdisciplinary nature of decision science, the diversity of viewpoints, the controversies and the areas of nascent consensus.
- Know specific concepts, theories, and experimental results covered in the course.
- Be able to read and discuss research papers from multiple disciplines.
- Be able to critically evaluate scientific research.

Textbook

Charles A. Holt (2019). *Markets, Games, and Strategic Behavior: An Introduction to Experimental Economics*, Second Edition. Princeton, NJ: Princeton University Press. ISBN-13: 978-0691179247

It is important that you purchase the 2nd edition of this textbook. There will also be reading consisting of articles as well as chapters from edited books. Any additional required readings will be available on Canvas for you to download. **Do not skip or skim the required readings.** Your exams will be based on these readings and material addressed in class. The Schedule on the last page indicates which readings are due for each class period. The readings should be done **before class**.

Experimental Software: MobLab

We will be conducting class experiments using online experimental software, MobLab. Please do this before the next class session as we will have our first experiment! There is a small license fee to be paid by you: \$25 per student.

To Register: Go to www.moblab.com, click ‘Sign Up’ to sign-up for a Student Account. You can also download the MobLab iOS or Android app and create your student account through the app.

IMPORTANT: To facilitate record-keeping, use your university email address.

To Join the Class: Using a browser or the MobLab app, sign into the Student Console. Choose Join a Class and enter our Class Code:

cgemj45w3

In the resulting popup, you will be prompted for the student fee which is payable by credit card. Once your payment is processed, you should have confirmation that you have joined our class.

Please read the MobLab guide that is available on Canvas for information about participating and playing games. Any questions or run into issues: please email support@moblab.com

In-class Experiments

I have marked the schedule with the Wednesdays we will have a synchronous class labs (S LAB) and they will begin **Wednesdays at 12pm**. I have also marked the schedule with the asynchronous class labs (A LAB) and they will be open for several days for you to complete individually. I will announce the time frames in lecture videos and in an announcement on Canvas. Participating in the experiments is not required, but strongly, strongly encouraged if you can attend because (1) they are fun! (2) you will learn more from participating, and (3) it will make completing the lab assignments more straightforward.

Synchronous Recitation Sections

Joseph will hold recitations as scheduled on Thursdays using Zoom. You will receive an email via Canvas with a link to the meeting. While not required, recitation attendance is strongly encouraged if you can attend. It is an opportunity for you to go over the week’s discussion questions and any lab assignments. These questions will make up the two exams in the course.

Technological Requirements

Please visit the [Rutgers Student Tech Guide](#) page for resources available to all students. If you do not have the appropriate technology for financial reasons, please email Dean of Students deanofstudents@echo.rutgers.edu for assistance. If you are facing other financial hardships, please visit the [Office of Financial Aid](#).

Any live lectures, all recitations, and all office hours will be conducted using **Zoom**. You do not need to purchase any software to join a meeting or a videocall. Basic information about Zoom can be found here:

- <https://zoom.us/meetings>

You can join a meeting or videocall by either downloading (free!) the Zoom app or by launching it in a browser.¹ You can sign up for a free Zoom account if you want to, but it isn't necessary.²

NOTE: Class meetings and recitation sections on Zoom (including video, audio, and chat text) will be recorded.

An important note about video: Please turn on your video when possible. It is helpful to be able to see each other, just as in an in-person class. Exceptions: If you have limited internet bandwidth or no webcam, it is ok to not use video or if you're unable to find an environment without a lot of visual distractions, it is also ok to turn off your video.

Please make use of the next few days to see what set-up works for you. Please learn how to unmute yourself and also turn on your video. I can't promise that things will always go smoothly (e.g. I hear that this week Zoom had massive outages as schools resumed classes), but I will try my best to have things run as smoothly as can be expected under the circumstances.

Evaluation

There will be a total of 1000 points possible in this course.

- Discussion Questions (30%)(300 points): Each week you will have Discussion Questions based on the reading(s) and lecture. The purpose of the requirement is for you to invest time answering the Discussion Questions before class and before recitation. Answers will be coarsely graded using the scale Complete (30 points), Incomplete (15 points), and No Credit (0 points). There are a total of 13 assignments. **You can work in groups of up to 4 people.** Submit one set of answers by **THURSDAY 9am** via Canvas under Assignments in .pdf; be sure to include anyone's name who deserves credit for the work. **You can miss three DQ assignments for any reason without penalty.**

¹I have read that it is more stable in Chrome.

²Possible benefits of signing up for a free account: you can host your own video chats to work on discussion questions with others, you can join a meeting from your phone, stay connected with friends and family, etc.

- Laboratory Assignments (30%) (300 points): There will be four laboratory assignments each worth 100 points. The data from your experimental session will be posted on Canvas and there will be several questions about the design and results. **You can work in groups of up to 4 people.** Submit one set of answers. See the class schedule for the due dates for the lab assignments; answers are to be submitted on Canvas by 9am in .pdf. **You can miss one lab assignment for any reason without penalty.**
- Two Exams (40%) (400 points total): Each exam will count for 200 points. The midterm will cover material in the first half of the course and will be a take home exam due via Canvas on **Oct 21 by 9am**. The second exam will cover material in the second half of the course and will be a take home exam due via Canvas on **Dec 20 by 4pm**. The take home exams are **to be your own work**. Please upload a .pdf with your last name in the file name. The format of each exam will be 8 short answer questions. They will be based on the Discussion Questions and Lab Assignments that you will go over in recitation.
- Extra Credit Option:
Linguistics experiments. A number of researchers in Linguistics conduct experiments. You have the opportunity to participate in **at most 3 experiments for 3 points each** added to your final grade. Information for accessing the subject pool is available on Canvas under Resources. I will be notified about your participation automatically. If you sign up for, but fail to show up for two or more experiments, you may be barred from further participation, so please note the time and location of your experiments, and take your schedule and transportation time into account. Please note that you need to select this course as the one you want the extra credit to count toward. NOTE: *You cannot double count points so be sure to choose the course you'd like to receive the extra credit points toward.*

Trying Our Best During a Global Pandemic

You are trying to learn — and I am trying to teach — during a global pandemic. If we are lucky, all that will mean for us is that the semester will be more stressful than usual. I'm usually pretty strict for basically everything related to my courses, and I usually hold myself to the same high standard that I hold my students. For example, I expect things turned in on time and in return we grade material and get it back to students quickly. But seriously, there is a global pandemic going on. So let's just agree that we will all try our best. I will cut you some slack, and I expect you to cut me some slack, provided that we communicate

with each other about our needs and constraints. (used with permission from Ryan Briggs @ryancbriggs)

Get Involved with Cognitive Science Club!

Find information on the exciting events being organized by the [Cognitive Science Club](#).

Upcoming Events in Cognitive Science

RuCCS hosts a number of exciting events, including a seminar series you may find interesting that features distinguished speakers. The talks are Tuesdays 1-2:30pm. See the [schedule](#).

Rutgers Policy on Academic Integrity and Code of Student Conduct

Rutgers has a clear policy on Academic Integrity with very low tolerance for any form of cheating or plagiarism. This policy will be adhered to strictly. Please be sure to acquaint yourself with this policy. Violations include cheating, fabrication, plagiarism, denying information to or misleading others, or facilitating these violations. A useful interactive tutorial on plagiarism can be found here: <http://library.camden.rutgers.edu/EducationalModule/Plagiarism>

You can find more information on the [Rutgers' Academic Success page](#).

Students with Disabilities

The University is committed to providing students with documented disabilities equal access to all University programs and facilities. If you think you have a disability requiring accommodations, you must register with (ODS). If you have received an Accommodation Letter for this course from ODS, please provide me with that information privately so that we can review those accommodations.

Email Etiquette

The following webpage "Email Etiquette: Guidelines for Writing to Your Professors" created by Dr. Mark Tomforde is **required reading** for the course:

<https://marktomforde.com/academic/undergraduates/Email-Etiquette.html>

Date	Topic	Readings Due	Assignment Due
Sept 2	Introduction	Snoop says read syllabus	meet people in recitation
9	[S LAB] What is Rationality?	Over (2004) ; optional Gigerenzer and Selten (2001)	
16	[S LAB] Market Experiment	Holt Ch 1 & 2; optional Smith (1962)	
23	[S LAB] Experimental Design	Holt Ch 13; optional Friedman & Cassar (2004)	LAB 1 Markets
30	[A LAB] Expected Utility Theory	Holt Ch 3; optional Baron (2004)	
Oct			
7	Prospect Theory	Holt Ch 4 & Tversky & Kahneman (1981)	LAB 2 Lottery
14	[S LAB] Mental Accounting	Thaler (1999)	
21	[S LAB] Fairness and Altruism	Holt Ch 14; optional Rigdon, et al. (2009)	EXAM 1 DUE as .pdf by 9am
28	[S LAB] Investment Game	Holt Ch 15; optional Chaudhuri (2009)	LAB 3 Cooperation
Nov			
4	[A LAB] Public Goods	Holt Ch 16	
11	[A LAB] Intertemporal Choice	Berns, et al. (2007) ; optional Hare, et al. (2009)	LAB 4 Public Goods
18	Heuristics and Biases	Tversky & Kahneman (1974)	
25	NO CLASS/NO RECITATION	(Note: Fri classes meet)	
Dec			
2	Neuroeconomics	Saxe & Kanwisher (2003) ; optional Camerer, et al. (2005)	
9	Policy Issues	Thaler & Sunstein (2008)	LAST CLASS
14			EXAM 2 Posted on Canvas
20			EXAM 2 DUE as .pdf by 4pm

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