

# Course Syllabus

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## Psychology 253: Introduction to Judgement and Decision making

**Summer 2021 (May 24 – June 30)**

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Office Hours: by appointment

**Time (synchronous class meetings):** Thursday\*, 5:30 – 9:30 pm

\*the course will combine asynchronous and synchronous lectures (see the timeline below for further details), so it is important that you block off the time indicated above on a weekly basis.

**Office hours:** By appointment

## Overview

This course addresses the *ideal* standards of judgement and decision-making, and the ways in which people fall short according to these standards, with emphasis on the latter. We will discuss heuristics and other intuitive strategies that people may use in day-to-day thinking, and biases that result from this use. We will apply this approach to shed light on faulty analyses in medicine, law, and, most of all, everyday thinking. Understanding the ideals of good thinking and causes of our failure to conform to these ideals may ultimately help improve the decisions we make in private and professional lives.

## Readings

The primary assigned reading for this class is [Thinking and Deciding, 4<sup>th</sup> Ed](http://www.amazon.com/Thinking-Deciding-Jonathan-Baron/dp/0521680433#reader_0521680433) ([http://www.amazon.com/Thinking-Deciding-Jonathan-Baron/dp/0521680433#reader\\_0521680433](http://www.amazon.com/Thinking-Deciding-Jonathan-Baron/dp/0521680433#reader_0521680433)) (henceforth, T&D4) by Jonathan Baron. You will also need to purchase or loan [Yes! 50 scientifically proven ways to be persuasive](http://www.amazon.com/Yes-Scientifically-Proven-Ways-Persuasive/dp/1416576142#reader_1416576142) ([http://www.amazon.com/Yes-Scientifically-Proven-Ways-Persuasive/dp/1416576142#reader\\_1416576142](http://www.amazon.com/Yes-Scientifically-Proven-Ways-Persuasive/dp/1416576142#reader_1416576142)) (exploring a variety of social heuristics and their application in business and daily life) by Noah Goldstein et al. (Please note that each reading assignment should be completed **before** a class for which it has been assigned). Supplementary readings will be made available via this canvas site.

## Assignments, Exams, and Exercises.

There will be two take-home exams---a 90-minute midterm and a 90-minute final (please see below), both consisting of multiple choice / short answer / true-false questions. The focus will be on materials from the lectures, which cover the book selectively. **The midterm exam and the (non-cumulative) final exam are worth 25 points each.** The [reasoning exercise](#) (Exercise 1) **and the ["influence strategy" exercise](#)** (Exercise 2) exercise will **be worth 15 points each.**

## Class participation/preparation.

You are expected to attend all meetings and to be prepared in time for each meeting. Preparation is how well you know the material when called upon and how much effort you put into making the class work by volunteering comments and observations. Participation is an important component of this course. Because the material of the course deals with the substance of everyday life, a test of its usefulness and of your understanding is to make contact between the course topics and your own everyday experience. So I expect that everyone will have something to contribute and I highly encourage you all to participate in class discussions as much as you can. **Attendance/participation**

**will be worth 20 points.**

Opportunities for earning some extra credit will be discussed as we go along.

**Points-to-grades cutoffs:**

99 A+

> 93 A

90-92 A-

87-89 B+

84-86 B

80-83 B-

76-79 C+

72-75 C

68-71 C-

56-67 D

< 55 F

**COURSE TIMETABLE** (subject to change)



A = Asynchronous lecture slides (please see "Class recordings" for asynchronous lectures); S slides = Synchronous meeting slides. All asynchronous lectures on a given topic should be reviewed prior to our synchronous class on the same topic.

**1. week of May 25. The tale of two systems: *Heuristics and errors*. slides. (synchronous - May 27).**

Read T&D4, Chs.1\*, 2\*. [Supplementary reading](http://www.columbia.edu/itc/hs/medinfo/g6080/misc/articles/TverksyKahneman1974.pdf) [.\(http://www.columbia.edu/itc/hs/medinfo/g6080/misc/articles/TverksyKahneman1974.pdf\)](http://www.columbia.edu/itc/hs/medinfo/g6080/misc/articles/TverksyKahneman1974.pdf).

Developing normative and descriptive models.)

**2. week of May 31. Meet your system 2: *Logic (and Rationality)*. slides. (synchronous - June 3).**

Read T&D4, Chs.3, 4. Optional: [Answer to the logic exercises on p.93](#)  and [Euler circle representations of common categorical syllogism premises](#) .

**3. week of June 7. Probability: *Bayes rules! A* slides. slides. (synchronous - June 10).**

Read T&D4, Chs. 5, 6. [Supplementary reading](#) [\\_\(http://www.scientificamerican.com/article/why-our-brains-do-not-intuitively-grasp-probabilities/\)\\_](http://www.scientificamerican.com/article/why-our-brains-do-not-intuitively-grasp-probabilities/).

For a detailed statement of the Monty Hall problem, [click here](#) [\\_\(https://statisticsbyjim.com/fun/monty-hall-problem/\)\\_](https://statisticsbyjim.com/fun/monty-hall-problem/).

If you feel like playing a few quick rounds yourself (guided by the above), [click here](#) [\\_\(http://math.ucsd.edu/~crypto/Monty/monty.html\)\\_](http://math.ucsd.edu/~crypto/Monty/monty.html).

For the Bayes calculator, [click here](#) [\\_\(http://psych.fullerton.edu/mbirnbaum/bayes/BayesCalc.htm\)\\_](http://psych.fullerton.edu/mbirnbaum/bayes/BayesCalc.htm).

Or if you just want to see improbably cute kittens, [click here](#) [\\_\(http://attackofthecute.com/search.php?f=kittens\)](http://attackofthecute.com/search.php?f=kittens)

[\\_\(http://attackofthecute.com/search.php?f=kittens\)](http://attackofthecute.com/search.php?f=kittens)

**Midterm. Exam window: June 13, 11:59pm EDT to June 15, 11:59pm EDT**

***the midterm sample questions* ([with](#)  and [without](#)  answers).**

**4. week of June 14. Utility: *Bernoulli's gift*. slides. (synchronous - June 17).**

Read T&D4, Chs. 10,11. [Supplementary reading](#): [\\_\(https://www.authentic happiness.sas.upenn.edu/newsletters/authentic happiness/happiness\)](https://www.authentic happiness.sas.upenn.edu/newsletters/authentic happiness/happiness)

**5. week of June 21. Utilitarianism: *Down the wrong track*. slides. (synchronous - June 24).**

Read T&D4, Ch.16. [Supplementary reading](#) [\\_\(http://home.uchicago.edu/bartels/papers/Bartels-Pizarro-2011-Cognition.pdf\)\\_](http://home.uchicago.edu/bartels/papers/Bartels-Pizarro-2011-Cognition.pdf). Influence strategy presentations (the manner and style of said presentations will be discussed in class).





**5 1/2. week of June 28. Intertemporal choice: *The Odysseyan gambit*. (synchronous - July 1).**







Read T&D4, Ch.19. [Supplementary reading 1.](https://www.nytimes.com/2018/06/10/smarter-living/improve-self-control.html) [\\_\(https://www.nytimes.com/2018/06/10/smarter-living/improve-self-control.html\)](https://www.nytimes.com/2018/06/10/smarter-living/improve-self-control.html) [Supplementary reading 2](https://www.theatlantic.com/family/archive/2018/06/marshmallow-test/561779/) [\\_\(https://www.theatlantic.com/family/archive/2018/06/marshmallow-test/561779/\)](https://www.theatlantic.com/family/archive/2018/06/marshmallow-test/561779/).

**Final. Exam window: TBD to TBD (the times will be specified by the midterm or sooner).**

***the final sample questions (with and without answers).***

## Course Summary:

Date	Details	Due
Mon May 21, 2018	 <a href="#">Test Event</a> ( <a href="https://canvas.upenn.edu/calendar?event_id=3212410&amp;include_contexts=course_1573554">https://canvas.upenn.edu/calendar?event_id=3212410&amp;include_contexts=course_1573554</a> )	12am
Fri Jun 12, 2020	 <a href="#">Midterm 1</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799732">https://canvas.upenn.edu/courses/1573554/assignments/8799732</a> )	due by 11:59pm
Wed Jul 1, 2020	 <a href="#">Final</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799731">https://canvas.upenn.edu/courses/1573554/assignments/8799731</a> )	due by 11:59pm
Tue Jun 8, 2021	 <a href="#">Exercise 1 (Reasoning exercise)</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799733">https://canvas.upenn.edu/courses/1573554/assignments/8799733</a> )	due by 11:59pm

Date	Details	Due
Thu Jun 24, 2021	 <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799734">Exercise 2 (The "influence strategy" exercise)</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799734">https://canvas.upenn.edu/courses/1573554/assignments/8799734</a> )	due by 5:30pm
	 <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799735">Extra credit</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799735">https://canvas.upenn.edu/courses/1573554/assignments/8799735</a> )	
	 <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799736">Final</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799736">https://canvas.upenn.edu/courses/1573554/assignments/8799736</a> )	
	 <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799737">Midterm</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799737">https://canvas.upenn.edu/courses/1573554/assignments/8799737</a> )	
	 <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799738">Midterm 1 - Instructions and Policies</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799738">https://canvas.upenn.edu/courses/1573554/assignments/8799738</a> )	
	 <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799739">Participation</a> ( <a href="https://canvas.upenn.edu/courses/1573554/assignments/8799739">https://canvas.upenn.edu/courses/1573554/assignments/8799739</a> )	