# Updated: 3/17/2022 Subject to Change

### OID290 Decision Processes Summer 2022, T/Th 8:30am-12:20pm, Location TBD

#### Instructor

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### **Course gist**

My aim in this course is to help you make better decisions and influence the decisions of others, through a hands-on learning experience featuring real-life challenges from outside organizations and guests.

### **Course overview**

Often it is not possible to make decisions analytically: the data doesn't exist, the formula isn't clear, or there is no time for sophisticated calculations. Worse, feedback on the "right" answer may only come years later, or in an ambiguous or subjective form, or never emerge at all. In these cases, we often rely on judgment, which is unfortunately far from perfect! This course sheds a light on those imperfections – our shared biases – and teaches you how to tackle them in your personal and professional life.

Academic studies will focus on cognitive psychology and statistics, plus a little social psychology. Examples and exercises will focus on real-world settings, with special emphasis given to applications and complications (e.g., ethics, change management) to empower you to use the course material beyond the classroom. Most importantly, assignments will be linked to *real* challenges with *real* decision makers in the *real* world, featuring guests from external organizations who can share insider insights and practical feedback. Throughout the class, you will be encouraged to share your own professional and personal examples, and I will similarly incorporate illustrative stories from my past life applying this material in client collaborations.

### Grading

Participation in Online Surveys & in Class	Individual	10%
3 In-Class Quizzes (~20-min, closed book)	Individual	20% (I will throw out your lowest score)
3 Take-Home Assignments (open book)	Individual	40% (I will throw out your lowest score)
2 In-Class Group Challenges (open book)	Group	30%

Online surveys are short, meant to collect data that we will use to demonstrate concepts in class.

You will have 3 individual quizzes and 3 individual assignments. You can either do all 3, and I will throw out your lowest score, or you can do only 2 and skip 1.

Assignments and challenges are case-based prompts, often developed with partners at outside companies. Beyond evaluating your application of the course material, we will aim to provide you with feedback about how your ideas would play out in the "real world". Assignment and challenge prompts will be shared in-class. See below schedule for more details.

### **COVID Safety**

All students are expected to participate actively in class discussion and in-class group work. However, students unable to attend class due to COVID-related or other valid reasons will by fully excused. All classes will be recorded to accommodate such circumstances. Our COVID policy will be updated closer to the date, based on University guidance.

## Current Class Schedule – Subject to Change

Class	Date	Торіс	Read this before class	Do this by noon the day before class	
			Humans vs. Statistics		
	1	"Do we still remember the question	on we are trying to answer? Or have we substituted an easie	r one?" ~Daniel Kahneman	
1	Tue 5/24	The Mother of All Biases	Tony Romo Calls Plays Before They Happen (2018)	Online Survey 1 (due 5/23 by 12pm ET)	
2	Thu 5/26	Biases from Representativeness, Availability, Confirmation	Interview with Annie Duke (2018)	Assignment 1 (due 5/25 by 12pm ET)	
			Humans vs. Economics		
"Th	ne purely		g a social moron. Economic theory has been much preoccu	pied with this rational fool." ~ Richard Thaler	
3	Tue 5/31	In-Class Quiz 1 Psychology of Money: Prospect Theory, Mental Accounting	From Cashews to Nudges: The Evolution of Behavioral Economics (2017, 50-min video)	Online Survey 2 (due 5/30 by 12pm ET) Form a Group of 2-3 for the Challenges	
4	Thu 6/2	Psychology of Choice: Framing, Reason- Based Choice, Many Selves	Struggles of a Psychologist Studying Self-Control (2014)	Assignment 2 (due 6/1 by 12pm ET)	
Humans vs. Machines					
		"It is the duty of ma	chines and those who design them to understand people." ~	Don Norman	
5	Tue 6/7	In-Class Quiz 2 Beyond Bias: Noise, Reliability, Crowd Wisdom, Algorithms	Noise: How to Overcome the High, Hidden Cost of Inconsistent Decision Making (2016) Algorithms, Correcting Biases (2018)	Online Survey 3 (due 6/6 by 12pm ET)	
6	Thu 6/9	Midterm Challenge + Guest Panel	Decision Processes "Cheat Sheet"	Prepare for Midterm Challenge	
			Decision-Making Toolbox		
	Т	"If you we	ant truly to understand something, try to change it" ~Kurt Lew	/in	
7	Tue 6/14	Tools: Choice Architecture, Nudges, Principles of Influence	Nudging: A Very Short Guide (2014)	Online Survey 4 (due 6/13 by 12pm ET)	
8	Thu 6/16	Tools: Structure for Individual and Group Decisions	A Structured Approach to Strategic Decisions (2019) 10 Commandments for Aspiring Superforecasters (2015)	Assignment 3 (due 6/15 by 12pm ET)	
9	Tue 6/21	In-Class Quiz 3 Tools: Inference, Experiments, Degrees of Freedom, Mega/Meta Studies	Scientific Studies (2016, 20-min video) Please, Corporations, Experiment on Us (2015)	Online Survey 5 (due 6/20 by 12pm ET)	
			The Devil in the Details		
	"To do a great right do a little wrong." ~Shakespeare				
10	Thu 6/23	Fairness, Ethics, Nudging v Sludging	The Power of Nudges, for Good and Bad (2015)	Online Survey 6 (due 6/22 by 12pm ET)	
11	Tue 6/28	Final Challenge + Guest Panel	Decision Processes "Cheat Sheet"	Prepare for Final Challenge	