Multidisciplinary Approaches to Human Decision Making

Psych G4285 (1-3* points) Fall 2016

<u>Course Information</u> 405 Schermerhorn Mondays, 2:10-4pm Instructor Information Katherine Fox-Glassman Office: 314 Schermerhorn Office Hours: tbd email: kjt2111@columbia.edu

Course Description

Discussion of selected topics and issues in human decision making. Our focus for the Fall 2016 semester will be on decision architecture, behavioral nudges, and the resultant behavioral "dodges" that might result from use of nudges.

Prerequisites

PSYC W2235 or an equivalent course on judgment and decision making, and the instructor's permission.

Enrollment limit: 12. If the course is full, senior psychology majors, senior neuroscience and behavior majors, and psychology postbacs in the Certificate Program will have priority, followed by junior majors, followed by non-majors. Other things being equal, students who have the best preparation and strongest motivation will be selected.

Role in the Psychology Curriculum

This course is designed to give advanced undergraduates and graduate students in the Psychology Department a deeper understanding of current topics in the field of judgment and decision making. As topics and readings change each semester the course is offered, this seminar may be repeated for additional credit.

*Taking this course for 3 points will fulfill the Group I Requirement of the Psychology Major or Concentration and/or the seminar requirement of the Psychology Major; the P5 Requirement of the Neuroscience and Behavior Major; and the seminar requirements of the Psychology MA and MPhil degrees. Any students wishing to take this course for fewer than 3 points should discuss their plans with me before registering. Nearly all students taking this course enroll for 3 points; the assignments listed in this syllabus assume a 3-point load.

Motivating Questions

- 1. How can researchers/practitioners/marketers/leaders use theories from the judgment and decision-making literature to influence people's choices and behavior?
- 2. What side effects—positive and negative—might the use of these "decision-architecture tools" bring about, beyond the particular behavior that they target?
- 3. What are the ethical implications of the use of decision architecture tools, and by extension, of the theory-based research that underlies those tools?

Course Overview

Decades of cognitive science research has left the field with a thorough—though of course never complete—understanding about how humans perceive the world around them, make judgments, and come to decisions. Recently, a subfield within judgment and decision research has gained both prominence and momentum: the study of decision architecture tools. Also called behavioral nudges, decision architecture tools are methods of presenting choices to people such that the structure of the choice itself helps to influence the final decision. One common description of how these nudges work is that they "make the *good* choice also the *easiest* choice to make."

For example, more people will sign up to be an organ donor if the process is opt-out, rather than opt-in: if we have to check a box in order to indicate our willingness to become a donor, few people end up as donors, but if we instead need to check a box in order to indicate our unwillingness to be a donor, the vast majority of people end up on the donor list. This effect appears to be largely driven by the default bias, under which we tend to stick with an option that is pre-selected for us, and are hesitant to switch to an alternative. Lab studies have shown this effect, but it also appears, in quite dramatic fashion, in the real world: nations with opt-in donor registries tend to have donor rates in the 10-20% range, while countries using the opt-out system typically see more than 90% of their eligible citizens signing up to be donors.

Although there can be a clear public good to nudging people toward one decision over another, the use of these decision architecture tools in real-world settings (as opposed to carefully constructed laboratory situations) carries ethical and moral questions, as well as practical ones. Nudges are supposed to make the good choice the easy choice, but who decides which choice is good? Should the public be more aware of instances where their decisions are being manipulated? Is it even possible to construct a decision situation that doesn't involve some form of decision architecture? Does knowing about the power of nudges help people to remain unswayed by them? And what side effects might nudges have: does "tricking" a person into recycling produce positive spillover and thus encourage more environmentally friendly behaviors in the future, or might it give that person license to actually waste more in the future? These side effects, sometimes called "dodges," represent the current wave of research on decision architecture.

This course will explore decision architecture tools and methods from several angles: the cognitive theories that explain how, when, and why they work; the ethical implications of their use; and the unintended consequences they might have beyond their central effects.

Course Objectives

- 1. Students will gain a deeper understanding of the normative and descriptive theories of decision-making and judgment that have been used to develop prescriptive decision tools (decision architecture, or "nudges").
- Students will be able to recognize instances of behavioral nudges in research and in the real world, and to discuss both their efficacy and the cognitive mechanisms by which they operate.
- 3. Students will develop nuanced and likely diverse opinions, backed by empirical results and real-world evidence, about the ethical and moral implications of the use of decision architecture tools in a variety of contexts.
- 4. Students will leave the course with a deep familiarity with current research on decision making: they will be able to recognize and critique commonly used methodologies, to assess the validity and reliability of experimental designs, and to interpret and judge the inferences and conclusions that other researchers lay out in their papers.

Course Organization

<u>Class</u>

This class will meet once a week. Each two-hour course meeting will consist primarily of student-led presentations of one of the assigned readings, and discussion of the topics of those readings. Whether or not it is your day to present, please come to class prepared to actively participate!

Assignments

Note: more detail on each assignment will be discussed during the first class meeting, and posted on CourseWorks.

Response posts. Before each week's class, you will submit a short (300- to 500-word) response to one of the assigned readings. You'll post your response on our CourseWorks discussion board, which will allow you to preview what your classmates are thinking about the topic of the week.

Your posts will also help me and the week's student presenter get a sense for what everyone is thinking about the week's papers, including any common points of confusion.

Response posts should demonstrate a thorough reading of the week's papers, and should show that you are thinking carefully about the topics at hand. Although they don't need to be perfectly crafted examples of scientific prose, they should be clearly written, with appropriate attention to grammar, spelling, etc. (translation: you should read back through what you've written before posting it). All that said, the content and focus of your posts can vary quite widely. You might identify a connection between a theory or method discussed in the current paper and one used in another reading; you could lay out a theoretical or empirical question that the paper sparked in you; you could offer a substantive critique of a paper's methods or its interpretations of results; you could identify a real-world application for a theory or effect from the paper and discuss its possible implications. You might also choose to write a response to another student's response post, e.g., if someone else asks a question that you feel inspired to try to answer.

Each post is due by noon on the Sunday before class, starting with our second week of class, and is worth 2% of your grade. Posts made after noon on Sunday but before noon on Monday are worth 1%. Since there will be 11 weeks of presentations but response posts count for no more than 20% of your overall course grade, you may either skip one response post, or submit two late posts, and still end up with the full 20% for response posts.

"Policy" paper. You won't write a response post for the final class meeting; instead, imagine that you're the Behavioral Science Advisor to the next US President, and he or she has asked you for a concise statement of your recommendations for a National Decision Architecture Policy. For this assignment, you will write a short (500- to 1000-word) "policy" paper that reflects your personal view of how, when, and under what conditions behavioral nudges should be used. This paper is due in place of the response post for the final class meeting, and can be submitted via CourseWorks.

Student presentations. Each student will briefly present an assigned paper during one class period. Your job as presenter is to be our "resident expert" on the readings for this week, so while you can assume everyone has read the paper, your presentation should help to clarify any particularly tricky methods or results from the paper, and address any questions that your fellow students have. I'll be there to help you with this both as you prepare your presentation and during class, but it's your show!

Your 10-15 minute presentation should briefly cover the paper's important points and scientific value, recap the study's methods and results, and also offer a critical assessment of the work in the context of other course materials. Presentations should also include questions to start our discussion.

Detailed requirements for the presentation will be discussed during the first class meeting, when we will also go over the list of topics and tentative schedule. Please bring your calendars with you to the first class meeting to facilitate our creation of the schedule.

Final paper. The paper is a 10-page assessment of a particular decision architecture tool. The paper should: (1) review the theory or theories that underlie the tool (e.g., a paper on use of defaults would discuss Prospect Theory's reference point, the status quo effect, and possibly also Query Theory or other topics that help us to understand how default effects work); (2) describe the history and scope of the *use* of the tool in real-world situations, and/or the *testing* of the tool in laboratory studies (i.e., in what contexts or domains has the tool been used or tested, and are its effects consistent across all contexts? does it work the same way across different populations? does it interact with any individual difference measures, or with other behavioral nudges?); (3) examine what the current understanding of how this tool works might tell us about the theories that underlie it; (4) make predictions (hypotheses) about a few additional real-world contexts in which this tool likely would (or wouldn't) work, based on our theoretical understanding of it.

Students who are interested in writing a research proposal paper, or any other format of final paper that is around the same length and scope as the assignment described above, are heartily

encouraged to do so. If you think you might like to write a different kind of paper, please come talk to me about your ideas as soon as possible, but no less than two weeks before the final paper is due.

Detailed requirements and grading information for the paper will be posted midway through the semester. Final papers are due via CourseWorks by **11:59pm on Friday, December 16** (the first day of final exams). If your final exam schedule would make it particularly difficult to submit your paper by this due date, please contact me at least two weeks beforehand to discuss an extension. I am generally happy to arrange extensions, but only for students who consult with me *before* the due date, so plan ahead!

Grading

Participation:	20%
Response posts:	20%
"Policy" paper:	5%
Class presentation:	15%
Final Paper:	40%

There is no extra credit for this course. For students who are on the border between grades, I will consider their participation in discussions throughout the term to decide whether to bump them up to the next highest grade (e.g., a very high B+ could be bumped to an A-).

Class Policies

Class attendance. Participation is an essential component of this course and of your grade, and you are expected to attend each class period. Each student may miss one class meeting, for any reason, without any penalty to their participation grade. After that free miss, excused absences require a note from your doctor or advising dean, and unexcused absences will count against your participation grade.

Late assignments are generally marked down by 10% per day, unless you have contacted me *before* the due date to discuss an extension. Overall, I would prefer to have you all write quality papers and learn a lot in the process, but hand them in late, rather than dashing off some incoherent ideas in order to make the deadline—so if something comes up, please check in with me. But that said, "I can't finish the paper on time because I started it too late" is not a particularly convincing argument for an extension.

Class Conduct. Please turn off or silence your cell phones during class. Laptops are fine to use, but please respect your classmates and instructor by refraining from non-class-related activities such as email, Facebook browsing, and online shopping (unless you are buying stylish, decision-themed T-shirts for the whole class, in which case: proceed). Though you may have a preternatural ability to multi-task, using a laptop for purposes other than taking notes can be distracting to those around you (and also, studies show that people are actually pretty terrible at multitasking).

Academic Integrity. Academic honesty includes presenting only your own work in exams and assignments, and correctly attributing others' ideas where appropriate. Taking credit for work that is not your own is a serious violation within the academic community, and anyone found to be cheating or plagiarizing in this class will be reported to the university. Detailed definitions and examples of academic dishonesty (and a rundown of the consequences) are available in Columbia's Guide to Academic Integrity (<u>http://www.college.columbia.edu/academics/integrity</u>)—it might not be the most riveting text on the internet, but since you'll be held to it, you should probably give it a read.

I assume you're all here because you're interested in the course topics and enthusiastic to learn as much as you can. But I know that in real life, stuff happens. I always prefer to deal with any issues before they get so bad that they become overwhelming, or so bad that a student feels that cheating or plagiarism is his or her best (or only) option. After all, this is a course about focusing on prevention, and avoiding messy aftermaths. So please do come to me if you have any questions about how to properly cite a source or build upon others' ideas, or if you're feeling stressed out about the class workload (or about anything else). If you have an issue that you'd rather not talk about with me, you might consider speaking with your academic advisor or dean; with one of the Psych Department's other Directors of Undergraduate Studies (Trisha Lindemann or Nim Tottenham); or with the counselors at Columbia's Counseling and Psychological Services (http://health.columbia.edu/services/cps).

Students With Disabilities. Students with special needs who may require accommodations should make an appointment to see me as soon as possible, at least by the end of the second week of class. If you have not already done so, stop by the Office of Disability Services (ODS) on the 7th floor of Lerner Hall to register for support services. ODS often requires two weeks to process an application, so please contact them as soon as you can, preferably before the course begins.

Tentative List of Topics

A list of specific readings will be added before the fall semester begins, but even then readings are always subject to change, as students are encouraged to seek out alternative papers to present on, based on their particular interests. As a general rule of thumb, each week's readings will include one or two background papers (either review papers, or empirical papers establishing the theory behind a decision-architecture tool), and one empirical paper on which we'll focus most of our discussion during class.

Each class period after the first week will be devoted to one topic related to decision architecture. **The topics listed below are not necessarily in the order in which we will cover them**—we'll determine the final schedule for which topics we'll cover each week during the first course meeting, based on which topics each of you is interested in presenting on, and when you're able to do so. **Depending on student interest, we may end up skipping many of these topics and spending more than one week on others.**

The final reading list, with PDFs of all of the readings and the dates on which we'll cover each topic, will be posted on CourseWorks. There are no required textbooks for this course.

Week	Topics	Tentative reading assignments
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Week 1	 Introduction to the course What is decision architecture/behavioral nudges? What are different ways of classifying nudges (mindful vs. mindless; aligning vs. encouraging; context vs. presentation)? In what domains have nudges been studied? 	Johnson et al., 2012 Ly, Mazar, Zhao, & Soman, 2013 Thaler & Sunstein, 2009 (introduction, pp. 1-14)
Possible Topics for Weeks 2-12	 Default effects Risky choice framing Attribute framing Goal framing Temporal framing (delay/accelerate) Temporal structure (deadline salience; pre-commitment; existence of immediate alternative) Partitioning of options Ordering of options Attribute translation/expansion Injunctive norms Descriptive norms Descriptive norms Presentation of probability Promotion of instrumentality Priming Motivational fit (e.g., regulatory focus) Physical architecture "Pay-what-you-want" models Making private decisions social 	Readings for each lecture to be determined in consultation with instructor—a list from which students may choose will be posted on CourseWorks before the semester begins. Each class meeting will have 2-3 required readings, plus occasional supplementary (optional) background readings.

	 Positive spillover (momentum, activation of identity, etc.) Negative spillover (dodges, single-action bias, licensing, etc.) 	
Week 13	 Wrap-up discussion: When and where do behavioral nudges work? How do nudges interact with each other, and with their context? (How) can nudges be implemented ethically? Transparently? 	Hansen & Jesperson, 2013 Sunstein, 2015 plus the "Policy" Papers your classmates post on CourseWorks

List of Readings

Hansen, P. G., & Jespersen, A. M. (2013). Nudge and the manipulation of choice: A framework for the responsible use of the nudge approach to behaviour change in public policy. *Eur. J. Risk Reg.*, 3.

Johnson, E. J., Shu, S. B., Dellaert, B. G., Fox, C., Goldstein, D. G., Häubl, G., ... & Wansink, B. (2012). Beyond nudges: Tools of a choice architecture. *Marketing Letters*, *23*(2), 487-504.

Ly, K., Mažar, N., Zhao, M., & Soman, D. (2013). Nudging. 1-28.

Sunstein, C. (2015). What, Exactly, Do You Want? New York Times Op-Ed.

Thaler, R. & Sunstein, C. (2009). Nudge: Improving Decisions about Health, Wealth, and Happiness. Penguin: New York.

...plus more to come, depending on student interest!