

ECON 481 / PSYC 485
Principles of (ir)rational decision-making
Seminar in Microeconomics II/ Special Topics in Psyc II
Winter 2023

Course Information

Class Day, Time: Tuesday, 2:30 PM - 5:30 PM (ET)

Location of Course: Ellis RM 319

Course Website: onQ

Course Instructor: Anita Tusche, Ph.D. (she, her). Please refer to me as Dr. Tusche or professor.

Email: anita.tusche@queensu.ca

Office: Humphrey Hall RM 344

Office Hours: I will host a virtual office hour each week on Monday 4:30-5:30 pm (ET) via Zoom. The link can be found here (passcode: 113598), valid each week:

<https://queensu.zoom.us/j/97916456092?pwd=T3VvZUh4Z1ArZUFzL1Q1bHJ3VkU4QT09>

Email me when you enter the “Waiting Room” so I know you are waiting, and give me a chance to verify that you are a student in the course. I will speak with one student at a time while other students remain in the “Waiting Room.”

Email address to be used for Academic Consideration: Tara Karasewich (tk51@queensu.ca). Please cc me in all the emails to Tara (anita.tusche@queensu.ca).

Online Materials and Course Notes: Students are advised to consult onQ regularly for supplemental materials, updates, and announcements. All questions about course-related content should be addressed using the discussion board on onQ. Email me if you have any unsuitable questions for the discussion board (e.g., personal information or accommodations).

Acknowledgement of Territory

Queen’s is situated on traditional Anishinaabe and Haudenosaunee territory. We are grateful to be able to be live, learn and play on these lands. To acknowledge this traditional territory is to recognize its longer history, one predating the establishment of the earliest European colonies. It is also to acknowledge this territory’s significance for the Indigenous peoples who lived, and continue to live, upon it and whose practices and spiritualities were tied to the land and continue to develop in relationship to the territory and its other inhabitants today. The Kingston Indigenous community continues to reflect the area’s Anishinaabek and Haudenosaunee roots. There is also a significant Métis community and there are First people from other Nations across Turtle Island present here today. To read more about the history of the land, see the Queen's Encyclopedia at <http://www.queensu.ca/encyclopedia/t/traditional-territories>.

Equity, Diversity and Inclusivity Statement

Queen's University recognizes that the values of equity and diversity are vital to and in harmony with its educational mission and standards of excellence. It acknowledges that direct, indirect and systemic discrimination exists within our institutional structures, policies and practices and in our community. These take many forms and work to differentially advantage and disadvantage persons across social identities such as race, ethnicity, disability, gender identity, sexual orientation, faith and socioeconomic status, among other examples.

Course Description

This course examines fundamental theories and research findings on rational decision-making, drawing on research conducted by psychologists, economists, and biologists. We will compare basic principles of rationality with actual choice behavior and illustrate how the way that we think about decision problems systematically deviates from rationality. We will also discuss factors that underlie systematic biases in human decision-making and “irrational” behavior (including emotions and social factors), “nudges” that utilize characteristics of the human choice architecture, neurobiological underpinnings and determinants, and applications of JDM theories and results in various fields. ***This course focuses on the critical evaluation of recent applications of systematic biases in our everyday lives (e.g., healthcare, education, marketing, or consumer behavior in various domains and industries) and primary empirical research on this topic.*** Studying the principles of rational decision-making and systematic discrepancies with actual behavior is fascinating; it is also practically useful, as it can help us improve the quality of choices.

Intended Student Learning Outcomes and Methods of Assessment

At the end of the course, students should...

1. be able to describe *applications* of JDM theories (judgment and decision-making) from a *cross-disciplinary perspective*. Upon completing this course, students will be able to describe similarities and differences in theoretical concepts and empirical approaches of the respective discipline (e.g., psychology and economics) to study “rational” decision-making. Students will also be able to describe at least three valuable contributions of other fields that expanded their personal view on the topic of judgment and decision-making (assessed in reaction papers, group discussions, and the final paper).
2. be able to *critically evaluate* empirical studies in the field of decision theory and applications in various real-world domains (assessed in the oral presentation, group discussions, and final paper).
3. have further developed their *presentation skills*, ability to give (and take) constructive peer feedback, and their ability to successfully moderate group discussions (assessed in the oral presentation).

Textbooks/Readings

Required:

There are two textbooks for this course. I have chosen them because they are accessible and introduce applications of the core concepts of this course to real-world issues. Note: the focus of this class will be on recent primary research articles on the applications of these principles. The textbook chapters will provide background knowledge. In addition to the book chapters, there are

several empirical research articles and review articles (see the course overview below for details). The articles are available to download from the course website (onQ).

(1) **Thaler**, R. H., & Sunstein, C.R. (2021). *Nudge: The Final Edition*. Penguin books.

* This book is referred to as **TS** below.

* From the winner of the 2017 Nobel Prize in Economics, Richard H. Thaler (and Cass R. Sunstein); named a Best Book of the Year by *The Economist* and the *Financial Times*.

* *NOTE*: The book is the updated version of “Nudge: Improving Decisions About Health, Wealth, and Happiness.” Buy *Nudge: The Final Edition* edition of this book published in 2021. I will base all reading assignments on the latest edition

* available on Amazon: https://www.amazon.ca/Nudge-Final-Richard-H-Thaler/dp/014313700X/ref=sr_1_1?keywords=nudge+the+final+edition&qid=1672409198&sprefix=Nudge%3A+the+final+%2Caps%2C80&sr=8-1

(2) **Hastie**, R., & Dawes, R. M. (2009). *Rational choice in an uncertain world (2nd ed.)*. Thousand Oaks, CA: Sage Publications, Inc. ISBN 978-1412959032.

* This book is referred to as **HD** below.

* *NOTE*: Buy the second edition of this book, not the first edition. I will base all reading assignments on the second edition.

* available on Amazon: <https://www.amazon.ca/Rational-Choice-Uncertain-World-Psychology/dp/1412959039>

Additional reading material:

(3) **Kahneman**, D. (2011). *Thinking Fast and Slow*. Anchor Canada.

* Some of you might be familiar with Daniel Kahneman’s work on biases and heuristics in human judgment and decision-making. This textbook is not required for the course. However, it provides additional reading material for specific topics you might consider for your in-class presentation or the final research paper. I will point out particular chapters in the course outline below as possible background reading for specific presentations (note: those are only suggestions which might be more or less valuable depending on the particular topic that you decide to cover; use your own judgment to determine if the suggested chapters are a good fit). Obviously, you are free to read any other chapters, it’s an easy read, and I believe it’s a book that everyone should read at some point (but I might be biased...).

Contacting the Course Instructor

Students requiring assistance are encouraged to speak with me after class. I will leave the course approximately 10-15 minutes after the class ends and I will be more than happy to answer any questions during this time. This will happen outside of the seminar room to allow the following class to enter smoothly. Should you wish to meet with me outside of this time and the official office hours, please email me to make an appointment.

Email, while commonly used, does limit the effectiveness of communications and may not be the best way for me to answer your question(s). In such instances, I may suggest a personal meeting during office hours or at a mutually agreed upon time. I will do my very best to answer emails as soon as possible; however, emails can be expected to be replied to within two working days (i.e.,

a reply to a 11 pm Saturday night email may not arrive before Tuesday evening). To facilitate my responses, please include the course ID (i.e., “PSYC 485” or “ECON 481”) in the subject line of the email. Thanks!

Course Format

The format of this course will be largely focused on discussions and small group activities, with brief didactic lectures from your fellow students (presentations, see course outline below).

Grading Scheme

- | | | |
|---|-----|-----------------------------------|
| 1. Reaction papers (<i>best 10 out of 11</i>) | 15% | due: each Friday @ 6 pm |
| 2. Class participation and attendance | 25% | due: weekly |
| 3. Student presentation and discussion | 30% | TBD |
| 4. Final research paper | 30% | April 4 st at midnight |

* Note: see *Details on the Course Assignments*

Grading Method

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen’s Official Grade Conversion Scale:

Queen’s Official Grade Conversion Scale

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

Details on the Course Assignments

1. Reaction papers (total: 15%)

All students must read *all* the assigned (required) readings for the week. Each week you should submit a short reaction paper about the readings of the *upcoming* class (~0.5 page, *not more than 250-300 words*, single-spaced, 1-3 thoughts). These are designed to help you organize your ideas for the class discussion and identify the questions and issues that are most interesting to the class.

The reaction papers should include ideas that *GO BEYOND* the material presented in the readings. Do *NOT* summarize the readings. You are supposed to *apply, critically evaluate, and relate* the content of the required reading. You can...

- relate the readings to other points that have come up in class discussions or previous weeks
- discuss future directions for research; relate the readings to your own research, research interests, or other research that is relevant to the topic of the class but not necessarily covered in class
- criticism of the readings: point out problems with the theory or methods in the readings, or contradictions between these readings and other ideas that have come up in the course, any questions or concerns you may have about the major points in the readings. Be curious, humble, and constructive, not nasty
- life experiences that the reading may explain
- underlying big questions and assumptions

Deadline: reaction papers are **due on Friday *before* class at 6 pm** (deadlines are also specified in the course outline).

Late policy: I will apply an automatic **48h grace period for weekly reaction papers** (i.e., Sunday at 6 pm before class). Papers submitted after this grace period will not be considered for credit.

Submission: reaction papers have to be **uploaded onto onQ**. Submit your reaction paper in a word document with your *name* included as part of the file name and the *week #* of the respective readings (e.g., "**HomerSimpson_week2.doc**").

Grading: In total you have to submit 11 of these reaction papers. I will use the **best 10 out of 11** for grading (that also means that, theoretically, you can miss one submission). Grading of Reaction Papers (and **Class participation**, see below) is based on Young's I-C-E (Ideas, Concepts, and Extensions):

- 3/3 Comments and responses reveal a capacity to analyze, synthesize, and evaluate material and give evidence of original thinking and an extensive knowledge base. They demonstrate a careful, concise, critical analysis with a clear and well-argued hypothesis based on the material. They exhibit evidence of learning that is willing to explore beyond the initial learning situation.
- 2/3 Comments and responses reveal a good analysis and some critical reasoning. They demonstrate a reasonable understanding of relevant issues and familiarity with the material. They demonstrate a solid understanding of the relationship or connections among the basic concepts. They show a need to be more concise or precise in details and more careful in articulating arguments.
- 1/3 Comments and responses show an acceptable treatment of the subject matter. They demonstrate an understanding of the basic facts, vocabulary, details, and elemental concepts and show an ability to deal with simple issues arising out of the material. The student needs to engage the subject matter more thoroughly and formulate ideas more clearly.

* *Note:* These thought papers will feature prominently in the discussions in small teams at the beginning of each class. Your team will then present their results to the whole class (and defend their position). Thus, the work you put into your reaction papers will also make your life easier in class, potentially benefitting your grade for class participation (see below).

2. **Class participation and attendance (total: 25%)**

The quality of this course depends critically on your ability to generate illuminating discussions of the readings. Sometimes discussions will range way beyond what was included in the readings, and you should let that stimulate you, not feel that you have to stick to the readings or the reaction paper you handed in prior to class. If an exciting discussion develops that has little to do with what you said in your reaction papers, that's fine. Participate thoughtfully and enjoy the opportunity to engage with some of the brightest and most dynamic people in your cohort!

Note that if you do not attend, you cannot participate. Thus, part of participation is being (actively) physically and mentally present and engaged (not checking email).

Grading: Grading is based on Young's I-C-E (Ideas, Concepts, and Extensions), see above.

3. Student presentation and discussion (total: 30%)

Every student must (i) present *once* in class and (ii) lead a group discussion on the topic of the presentation. While individual presentations will probably be the norm, this might be subject to change depending on total course enrollment or students dropping the course over the first weeks. If two students present together in a team, teams must consist of one psychology student and one economics student.

The purpose of this assignment is fourfold: First, it will train students to read *empirical articles* in the field of decision theory. Second, students are encouraged to *think critically and apply the knowledge* they have acquired from the course in an applied context. Third, students will further develop their public speaking and *presentation skills*. Such a task is highly relevant to many of the possible career paths associated with a university degree in psychology, economics, the Life Sciences in general, and related disciplines. Fourth, the discussion phase following the presentation of the research article will allow students to develop their skills as a *moderator of group discussions*. Group work is an essential part of various workplaces, and the ability to structure and moderate communication in group contexts will be valuable.

The first part of your assignment is that you (or your team) will choose a research article (use google scholar, web of science, etc., for your literature search). Students can suggest **any** research article on an application of the topic covered in the class this week and/or the assigned reading material (examples of applications: healthcare, education, marketing, sports, or consumer behavior...).

Once you have identified the key research paper, your assignment requires an (ii) ***in-class presentation (20-30 min;*** probably closer to 20 min) and the (iii) subsequent ***discussion (10-20 min,*** ideally closer to 20 min). In sum (including the talk and the discussion), your presentation should be ***~40 min in total*** (and not exceed that time frame). As part of your assignment, you must moderate the discussion. Please ***prepare ~ 5 questions/discussions*** before class that help to stimulate exciting discussions and debates.

Note:

- ***The article requires the approval of the instructor!*** This means that if I don't find it suitable (see criteria below), *you will need to start over with your search.* Start early!

- ***The search for the article is an important part of the assignment.*** This being said, if you have trouble, you can come to me for help. Please see me early enough if you feel that this part of the assignment is not going well.
- The suggested article has to present ***empirical evidence*** (i.e., it can't be a review or opinion piece).
- It should ***not be older than 5-10 years*** (ideally withing the last 5 years; exceptions can be made for 'classics' and seminal papers).
- The article must be ***accessible*** by students of different research disciplines (i.e., psychology and economics).
- Research articles cannot be duplicated between presentations. Don't present a paper that has been covered in one of your other classes. The literature search and reading potential articles suitable for your presentation is an important part of the assignment.
- Some individual articles are *very* short (e.g., Science papers sometimes only cover 1-2 pages). Here, you should present information covered in the (often extensive) supplemental materials.

Deadline 1 (required): you will have to send me the article at least ***one week prior to your presentation***. Thus, the deadline is ***Tuesday at 2:30 pm the week before your presentation***. As noted above, it can take me up to two working days to respond to your email. The sooner you send me the article, the sooner I can approve it (or tell you why it is not suitable for the presentation). Again, please start early!

Deadline 2 (optional): You are welcome to see me ***during office hours (the day before your presentation) to receive feedback*** on your presentation slides and discussion questions. In that case, please email me a ***handout (or the presentation slides)*** and a list of ***~5 discussion questions*** before ***Monday at noon*** (i.e., the day before your presentation). You can make further edits afterwards, but it will give me a chance to look at your material.

Content: your presentation should address each of the following (this is not meant to be an exhaustive list of aspects you can include):

- How does the research article relate to the topic of the class?
- What was known before your selected research article, and what particular gap in knowledge did the experiment(s) address? (note that providing this adequate background for the viewer may require you to read a few key papers from previous work cited in the article)
- What was the specific research question asked, and why (at the time) was it important, timely or novel?
- What specific task and analysis methods were used?
- What did the authors find?
- Why are these results significant in this particular research area? How do they fit within the larger literature on this topic?
- What are some of the limitations in the methods used and/or conclusions drawn?

Grading will be based on the

- comprehensiveness and synthesis of the content (7%)
- clarity and quality of the presentation (10%)

- ability to pose important new research questions (3%)
- ability to successfully stimulate and moderate the group discussion and to answer questions succinctly and accurately (10%)

Please remember, you will (among other things) be graded on your ability to take complex ideas, research questions and approaches, and distill them so that they are easy-to-follow and readily comprehensible to non-experts in this area (this will require some thought on your part). Please note that I will take the peer feedback from your fellow students into account (see peer feedback sheet). This assignment is designed to train students' ability to critically evaluate their fellow students' presentations and provide feedback to the presenters about the effectiveness of their "teaching." Peer feedback forms can be found on and will also be handed out as printed versions in class.

All students should be prepared to ask questions of their peers, which will contribute to their credit toward class participation (see above).

4. Final research paper/grant proposal (total: 30%)

You will submit a research paper on a topic within the field of judgment and decision-making. This paper will include a review of past research relevant to your topic, and a proposal for future research on the *application* of a principle discussed in class. ***The topic of your research paper has to be on a different topic than your presentation.*** The reasoning behind this is to ensure that you have studied (and mastered) at least two topics of this course in greater depth. I will post a separate document with more details on this assignment on onQ.

Deadline: April 4th at midnight

Late policy: Late papers will be penalized 10% per day.

Important University Dates

Key dates (first day of class, tuition due date, last day to add/drop courses) are important to your academic success. Please find them at [Important Dates](#).

Course outline (topics/readings/due dates)

* Note: This schedule might be subject to change. In particular, there may be substitutions or additions to the list of readings. I will also announce any changes to the course outline on onQ.

* Note: “HD” refers to chapters in the second edition of the Hastie and Dawes text. “TS” refers to chapters of the book by Thaler and Sunstein.

	Topic	Reading
<i>Week 1</i>	Introduction	
January 10	<p><u>Key question(s):</u> What exactly is a “good” or a “rational” decision?</p> <p>What are the issues that we must face when we decide what choices to make, and what actions to take?</p>	<p><u>Required:</u> * You can download a pdf of these chapters from the course website (onQ)</p> <ul style="list-style-type: none"> - HD, Ch 2: What is decision making? - HD, Ch 8.4: Testing for Rationality - TS, Introduction (p. 1-15) <p><u>Additional readings/material:</u></p> <ul style="list-style-type: none"> - HD, Ch 1: Thinking and deciding - https://lt.org/publication/does-logically-incoherent-decision-making-really-have-negative-consequences - press coverage: Robert Thaler
<u>Homework</u>		Prepare a multi-attribute decision problem that you bring with you to class next week * <i>See course website for details.</i>
<u>Assignment</u>		Reaction paper #1 (@readings of <i>week 2</i>) due on Friday, Jan. 13, @6 pm * <i>upload onto onQ</i>
<i>Week 2</i>	How to deal with cognitive complexity: linear statistical models of choice and decision strategies	
January 17	<p><u>Key question(s):</u> What cognitive processes make it possible for us to choose between complex alternatives?</p> <p>What strategies do humans use to deal with complexity and to overcome cognitive difficulties in decision making?</p>	<p><u>Required:</u> * You can download a pdf of these chapters from onQ.</p> <ul style="list-style-type: none"> - HD, Ch 3: A general framework for judgment - HD, Ch 10: From preferences to choices <p><i>Note:</i> the choice strategies covered in the first part of chapter 10 will be the focus of some in-class active learning activities. I would like to focus the initial discussion phase on the topics covered in chapter 3, but you <i>can</i> use the content of chapters 10 for your reaction papers.</p> <p><u>Additional readings:</u></p> <ul style="list-style-type: none"> - Baron, J. (1994), Ch 20: Quantitative Judgment. p. 400-413. In: Thinking and

		<p>deciding (2nd edition). New York: Cambridge University Press.</p> <p>* one of the ‘classics’; provides more examples and background information; you will do fine in class without reading this though</p>
	Student Presentation 1 or 2	<p>Option 1: Maximizing vs. satisficing</p> <p><u>Possible article (pick one):</u></p> <ul style="list-style-type: none"> - Iyengar SS, Wells RE, Schwartz B. Doing Better but Feeling Worse: Looking for the “Best” Job Undermines Satisfaction. <i>Psychological Science</i>. 2006;17(2):143-150. - Chan, E. (2022). Can social comparison motivate satisficers? the role of input versus output in upward social comparison. <i>Journal of Consumer Psychology</i>, 32(4), 664-671. <p><u>Background reading:</u></p> <ul style="list-style-type: none"> - Saltsman, TL, Seery, MD, Ward, DE, Lamarche, VM, Kondrak, CL. Is satisficing really satisfying? Satisficers exhibit greater threat than maximizers during choice overload. <i>Psychophysiology</i>. 2021; 58:e13705.
		<p>Option 2: Voting and choice set size</p> <p><u>Possible article:</u></p> <ul style="list-style-type: none"> - Cunow, S., Desposato, S., Janusz, A., & Sells, C. (2021). Less is more: The paradox of choice in voting behavior. <i>Electoral Studies</i>, 69, 102230.
		<p>Option 3: Unconscious thought advantage in complex choice</p> <p><u>Possible article(s):</u></p> <ul style="list-style-type: none"> - Dijksterhuis, A., Bos, M.W., Nordgren, L.F. & van Baaren, R.B. (2006). On making the right choice: the deliberation-without-attention effect. <i>Science</i>, 311, 1005–1007.

		<p>* super short science article (2 pages)</p> <ul style="list-style-type: none"> - Nieuwenstein, M. R., Wierenga, T., Morey, R. D., Wicherts, J. M., Blom, T. N., Wagenmakers, E.-J., & van Rijn, H. (2015). On making the right choice: A meta-analysis and large-scale replication attempt of the unconscious thought advantage. <i>Judgment and Decision Making</i>, 10(1), 1-17. <p>* meta-analysis on the general topic</p>
<u>Assignment</u>		<p>Reaction paper #2 due on Jan. 20, @6 pm</p> <p>* <i>upload onto onQ</i></p>
Week 3	Heuristics and biases: availability, anchoring & adjustment	
January 24	<p><u>Key question(s):</u></p> <p>Additive linear models provide a good framework for how people combine several sources of information (cues, attributes) into summary judgments and choices. Yet rational analysis requires a systematic comprehensive representation of situations, probabilities and alternative outcomes. We now turn to the following questions:</p> <p>Why do people ignore relevant information?</p> <p>What are common biases in the selection and weighting of these cues and probability judgments of specific outcomes?</p>	<p><u>Required:</u></p> <ul style="list-style-type: none"> - HD, Ch 4: Anchoring and adjustment - HD, Ch 5: Judging heuristically (5.1-5.7) <p>* eventually we will read the whole Ch 5; starting @Ch. 5.8 the chapter talks about the effect of perceived similarity and representativeness (which we will cover next week)</p> <ul style="list-style-type: none"> - TS, Ch 1: Biases and Blunders <p>* in addition to anchoring and availability, this chapter introduces a number of systematic choice phenomena that we will cover over the next weeks. I recommend reading the whole chapter, but to focus your Reaction papers on the topics of this class (anchoring and availability).</p>
	Student Presentation 3	<p>Anchoring and Adjustment</p> <p><u>Suggested background reading:</u></p> <ul style="list-style-type: none"> - Kahneman Ch 11: Anchors
	Student Presentation 4	<p>Availability</p> <p><u>Suggested background reading:</u></p> <ul style="list-style-type: none"> - Kahneman Ch 12: The science of availability

		<ul style="list-style-type: none"> - Kahneman Ch 13: Availability, emotion and risk - Kahneman Ch 30: Rare Events (p. 322-328) <p>* note that Ch 30 refers to utility theory and prospect theory which we will cover later; even if you are not familiar with those concepts (yet), the chapter is still worth reading</p>
<u>Assignment</u>		Reaction paper #3 due on Jan. 27, @6 pm * <i>upload onto onQ</i>
Week 4	Heuristics and biases: reasoning based on similarities & causation	
January 31	<u>Key question(s):</u> Continued (see week 3)	<u>Required:</u> <ul style="list-style-type: none"> - HD, Ch 5: Judging heuristically (5.7-5.10) - HD, Ch 6: Explanation-Based Judgments - HD, Ch 7: Chance and cause <p>* feel free to go back to TS, Ch 1 (Biases and Blunders), p. 29-34 to refresh your memory</p>
	Student Presentation 5	Similarity and representative thinking * should pertain to a topic covered in HD 5 or 6 <u>Suggested background reading:</u> <ul style="list-style-type: none"> - Kahnemann Ch 14: Tom W's specialty - Kahnemann Ch 15: Linda: Less is more
	Student Presentation 6	Cause and Causation * should pertain to a topic covered in HD 7 <u>Suggested background reading:</u> <ul style="list-style-type: none"> - Kahneman Ch 10: The law of small numbers - Kahnemann Ch 16: Causes trump statistics - Kahnemann Ch 17: Regression to the mean
<u>Assignment</u>		Reaction paper #4 due on Feb. 3, @6 pm * <i>upload onto onQ</i>
Week 5	Probabilities and uncertainty	
February 7	<u>Key question(s):</u> Continued (see week 3)	<u>Required:</u> * In the first part of this class we will continue talking about biases and heuristics (related to probabilities and frequencies of events). We will then move on to some general thought about

		<p>“nudges.” I recommend that you pay equal attention to the required chapters in HD and TS.</p> <ul style="list-style-type: none"> - HD, Ch 8: Thinking rationally about uncertainty - TS, Ch 4: When Do We Need a Nudge? - TS, Ch 5: Choice Architecture
	Student Presentation 7	<p>Overconfidence: thinking rationally about uncertainty</p> <p>* The article should pertain to a topic covered in HD 8. Please coordinate with the other student presenting this week! You can use the suggested background reading (see below) as further help to pick a topic that you are particularly interested in.</p> <p><i>Suggested background reading:</i></p> <p>* it will depend on the topic that you will choose for the presentation, consider to have a look at one (or several) of these chapters</p> <ul style="list-style-type: none"> - Kahneman Ch 18: Taming intuitive predictions - Kahneman Ch 19: The illusion of understanding - Kahneman Ch 20: The illusion of validity - Kahneman Ch 21: Intuitions vs. formulas - Kahneman Ch 22: Expert intuition: When can we trust it? - Kahneman Ch 23: The outside view - Kahneman Ch 24: The engine of capitalism
	Student Presentation 8	<p>Overconfidence: thinking rationally about uncertainty</p> <p>* Please coordinate with the other student presenting this week! You can use the suggested background reading (see Student Presentation 7) as further help to pick a topic that you are particularly interested in.</p>
<u>Assignment</u>		<p>Reaction paper #5 due on Feb. 10, @6 pm</p> <p>* <i>upload onto onQ</i></p>
Week 6	Bounded rationality and the critique of the heuristics & biases program	
February 14	<u>Key question(s):</u>	<p><u>Required:</u></p> <p>By Week 6, we will have seen a number of examples of heuristics that may lead to systematic</p>

	<p>Are heuristics irrational? Or are these “fast-and-frugal” algorithms more robust, sturdier and have “better survival value” than optimal calculations (which are superior only when lots of information, computational capacity, and time are available)?</p>	<p>“errors” and/or “suboptimal” outcomes. The work by the ABC Group lead by Gerd Gigerenzer is an important critique of the heuristics and biases point of view. The following reading presents their theory of the role that heuristics play in judgment and decision making:</p> <ul style="list-style-type: none"> - Gigerenzer, G., & Brighton, H. (2009). Homo Heuristicus: Why biased minds make better inferences. <i>Topics in Cognitive Science</i>, 1, 107-143. * The article is available as a pdf on onQ. You can download it from there. <p>Look back at the readings from previous weeks, especially the chapters from Kahneman (if you read them) but also the contrast with the discussion of linear judgment models that we covered in week 2. What is similar and what is different between the views of Gigerenzer and the views of Kahneman & the chapters by HD?</p>
	<p>Student Presentation 9</p>	<p>Bounded rationality</p> <p><i>Suggested background reading:</i> * check out the ABC webpage for more background information</p> <ul style="list-style-type: none"> - abc_research_report_bounded_rationality_2 OR - abc_research_report_social_and_evolutionary_rationality_0-1
	<p>Student Presentation 10</p>	<p>Ecological rationality</p> <p><i>Suggested background reading:</i> * check out the ABC webpage for more background information</p> <ul style="list-style-type: none"> - abc_research_report_ecological_rationality_2 OR - abc_research_report_social_and_evolutionary_rationality_0-1
<p><u>Assignment</u></p>		<p>Reaction paper #6 due on Feb. 17, @6 pm * upload onto onQ</p>
<p>Reading week</p>		
<p>February 21</p>	<p>No classes</p>	

Week 7	Theory of preference	
February 28	<p>Now we transition to the topic of preference. Key question(s) are: How should we decide what we want?</p> <p>How badly do we want things (or want to avoid negative consequences)?</p> <p>What are the psychological processes and pitfalls when we try to evaluate our preferences?</p> <p>What does Expected Utility (EU) theory claim is the right way for a rational person to make decisions?</p> <p>What are ways that decisions by humans are likely to deviate from EU theory?</p>	<p><u>Required:</u></p> <ul style="list-style-type: none"> - HD, Ch 9: Evaluating consequences: Fundamental preferences * please pay particular attention to chapter 9.3 and 9.4 (and 9.1) * feel free to skip part 9.2 on the impact of emotions on evaluations, we will cover that topic in later sessions * Note: if you feel that the chapter 9.3 is confusing, please consider having a look at Kahneman Ch 26: Prospect theory (prospect theory will be the focus of our class in week 7 and 8) and/or Kahneman Ch 25: Bernoulli's errors (see below) - HD, Ch 12: A Descriptive Decision Theory * don't worry about the math and the details of the examples, we will focus on the three major conceptual characteristics (p. 275-276) to account for observed choice behavior <p><u>Suggested background reading:</u></p> <ul style="list-style-type: none"> - Kahneman Ch 26: Prospect theory - Kahneman Ch 25: Bernoulli's errors
	Student Presentation 11	<p>Reference point: Endowment effect * other possible topics include status quo bias</p> <p><u>Suggested background reading:</u> * Kahneman Ch 27: The endowment effect</p>
	Student Presentation 12	<p>Loss aversion ("losses loom larger") * possible topics also include how loss aversion can explain fairness preferences; emotional framing</p> <p><u>Suggested background reading:</u></p> <ul style="list-style-type: none"> - Kahneman Ch 28: Bad events - Kahneman: Ch 32: Keeping Score - Kahneman: Ch 34 Frames and Reality (p. 364-367)
<u>Assignment</u>		<p>Reaction paper #7 due on March 3, @6 pm * <i>upload onto onQ</i></p>
Week 8	Prospect theory: risk preferences	

March 7	<p><u>Key question(s):</u> What are ways that decisions by humans are likely to deviate from EU theory?</p>	<p><u>Required:</u></p> <ul style="list-style-type: none"> - Camerer, C. F. (2000). Prospect theory in the wild: Evidence from the field. In D. Kahneman & A. Tversky (Eds.), Choices, values, and frames (p. 288-300). New York: Cambridge University Press. - TS, Ch 12: Insurance: Don't sweat the small stuff. <p><u>Suggested background reading:</u></p> <ul style="list-style-type: none"> - Kahneman Ch 29: The fourfold pattern - Consider having a look at the chapter by Camerer (see Presentation 14), it's also one of the classics
	Student Presentation 13	<p>Fourfold Pattern of preferences in the "wild"</p> <p><u>Suggested background reading:</u></p> <ul style="list-style-type: none"> - Kahneman Ch 29: The fourfold pattern - also consider having a look at Kahneman Ch 30: Rare events
	Student Presentation 14	<p>Prospect theory in the "wild" * pick a topic from the article below (again one of the "classics")</p> <p><u>Suggested background reading:</u></p> <ul style="list-style-type: none"> - Camerer, C. F. (2000). Prospect theory in the wild: Evidence from the field. In D. Kahneman & A. Tversky (Eds.), Choices, values, and frames (p. 288-300). New York: Cambridge University Press.
<u>Assignment</u>		Reaction paper #8 due on March 10, @6 pm * upload onto onQ
Week 9	Nudges and society	
March 14	<p><u>Key question(s):</u> We will now turn to Thaler's proposed "nudges" and discuss how they relate to systematic choice biases, heuristics and descriptive theories of decision making.</p>	<p><u>Required:</u></p> <ul style="list-style-type: none"> - TS, Ch 13. Organ Donations: The Default Solution Illusion - TS, Ch 14. Saving the Planet
	Student Presentation 15	<p>Nudge Wildcard #1 * choose an article related to any type of nudge and domain mentioned in this week's readings</p>

		(or in <i>TS, Ch 9 or 12</i>); please coordinate with the other student presenting this week
	Student Presentation 16	Nudge Wildcard #2 * choose an article related to any type of nudge and domain mentioned in this week's readings (or in <i>TS, Ch 9 or 12</i>); please coordinate with the other student presenting this week
<u>Assignment</u>		Reaction paper #9 due on March 17, @6 pm * <i>upload onto onQ</i>
<u>Homework</u>		Suggest a nudge!
<i>Week 10</i>	Emotions and decision making I	
March 21	<u>Key question(s):</u> Do emotions have the power to shape decisions, with potentially detrimental or beneficial effects, or are they epiphenomenal by-standers of the true forces behind decisions?	<u>Required:</u> <ul style="list-style-type: none"> - Dunning, D., Fetchenhauer, D., & Schlösser, T. (2017). The varying roles played by emotion in economic decision making. <i>Current opinion in behavioral sciences</i>, 15, 33-38. * Provides an overview of empirical work on incidental (immediate) vs. anticipated emotions in (economic) decision making. Please note that the distinction between background and action-related emotions is less established. - Loewenstein, G. (2000). Emotions in economic theory and economic behavior. <i>American Economic Review: Papers and Proceedings</i>, 90, 426–432 * one of the 'classics' <u>Additional readings:</u> <ul style="list-style-type: none"> - if you skipped over that section in week 7, feel free to revise the couple of pages in HD, Ch 9.2 on the role of emotions in evaluations - Adolphs, R., & Andler, D. (2018). Investigating emotions as functional states distinct from feelings. <i>Emotion Review</i>, 10(3), 191-201. * if you have <u>no</u> prior background in theories of emotions, please have a look at this introduction/overview paper
	Student Presentation 17	Anticipated emotions <u>Suggested background reading:</u>

		<ul style="list-style-type: none"> - Lowenstein, G., Weber, E.U., Hsee, C.K., Welch, N. (2001). Risk as feelings. Psychol. Bull., 127, pp. 267-286. * a classic review delineating the distinction between anticipated and immediate emotions. * useful background reading if you if you focus on risk perception; there is a ton of research on that issue
	Student Presentation 18	Incidental (background) emotions <u>Suggested background reading:</u> <ul style="list-style-type: none"> - Finucane, M. L., Alhakami, A., Slovic, P., & Johnson, S. M. (2000). The affect heuristic in judgments of risks and benefits. Journal of behavioral decision making, 13(1), 1-17. * comprehensive theory delineating how fear and happiness influence decision making by prompting people to reinterpret the risks and outcomes they confront. * useful <i>if</i> you focus on risk perception
<u>Assignment</u>		Reaction paper #10 due on March 24, @6 pm * <i>upload onto onQ</i>
Week 11	Emotions and decision making II	
March 28	<u>Key question(s):</u> See week 10 (continued)	<u>Required:</u> * the reading list is short so that you can focus on your final paper <ul style="list-style-type: none"> - George, J. M., & Dane, E. (2016). Affect, emotion, and decision making. Organizational Behavior and Human Decision Processes, 136, 47-55. * parts of the paper overlap with last week's reading, but the sections on the role of regret, potential limitations as well as future directions are worth thinking about
	Student Presentation 19	Regret <u>Suggested background reading:</u> <ul style="list-style-type: none"> - Kahneman, Ch. 32 (p. 346-352)
	Student Presentation 20	Emotion regulation and cognitive reappraisal <u>Suggested background reading:</u>

		* there are a ton of papers, it really depends on your personal interest (framing effect, risk taking, etc.). Please get in touch if you need help or guidance
<u>Assignment</u>		Reaction paper #11 due on March 31, @6 pm * <i>upload onto onQ</i>
<u>Homework:</u>		Name one take away from the course
<u>Week 12</u>	Nudges II and course wrap up	
April 4		<u>Required:</u> <ul style="list-style-type: none"> - TS, Ch 15: Much Ado About Nudging - TS, Epilogue
	Student Presentation 21	Self-control and financial behavior and well-being * you can also present empirical research on non-financial well-being <u>Suggested background reading:</u> <ul style="list-style-type: none"> - TS, Ch 2: Resisting Temptation
	Student Presentation 22	Biases in voting and political decision-making <u>Suggested background reading:</u> <ul style="list-style-type: none"> - Antonakis, J., & Dalgas, O. (2009). Predicting elections: Child's play! <i>Science</i>, 323(5918), 1183-1183. - Todorov, A., Olivola, C. Y., Dotsch, R., & Mende-Siedlecki, P. (2015). Social attributions from faces: Determinants, consequences, accuracy, and functional significance. <i>Annual review of psychology</i>, 66, 519-545.

Late policy

Late assignments will receive a penalty of a drop of 10% (for that particular assignment) for each 24-hour period it is late. Assignments will not be accepted more than one week after the due date. Exemptions to the late penalty may be made for documented extenuating circumstances. Please email me as soon as you know you will be needing an extension.

Course Announcements

Throughout the course, I will routinely post course news in the Announcements section of the course homepage. I encourage you to actively check the course onQ main page for course announcements throughout the semester for reminders and additional course information or learning opportunities.

Course Feedback

At various points during the course, I may ask you to take part in a variety of feedback activities, such as surveys, questionnaires, and exit tickets. This feedback enables me to make any adjustments necessary to improve your learning environment. Additional feedback will be sought throughout the course. All surveys are anonymous and are directly related to activities, assessments, and other course material.

Online and Blended Course Support

For technology support ranging from setting up your device, issues with onQ to installing software, contact [ITS Support Centre](#).

Copyright of Course Materials

Course materials created by the course instructor, including all slides, presentations, handouts, tests, exams, and other similar course materials, are the intellectual property of the instructor. It is a departure from academic integrity to distribute, publicly post, sell or otherwise disseminate an instructor's course materials or to provide an instructor's course materials to anyone else for distribution, posting, sale or other means of dissemination, without the instructor's expressed consent. A student who engages in such conduct may be subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights.

Discussion Guidelines

University is a place to share, question, and challenge ideas. Each student brings a different set of lived experiences. You can help to create a safe, respectful place for learners by promoting the following guidelines:

1. Make a personal commitment to learn about, understand, and support your peers.
2. Assume the best of others and expect the best of them.
3. Acknowledge the impact of oppression on other people's lives and make sure your writing is respectful and inclusive.
4. Recognize and value the experiences, abilities, and knowledge each person brings.
5. Pay close attention to what your peers write before you respond. Think through and re-read your writings before you post or send them to others.
6. It's alright to disagree with ideas, but do not make personal attacks.
7. Be open to being challenged or confronted on your ideas and challenge others with the intent of facilitating growth. Do not demean or embarrass others.
8. Encourage others to develop and share their ideas.

Turnitin Statement

This course makes use of Turnitin, a third-party application that helps maintain standards of excellence in academic integrity. Normally, students will be required to submit their course assignments to through onQ to Turnitin. In doing so, students' work will be included as source documents in the Turnitin reference database, where they will be used solely for the purpose of detecting plagiarism.

Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. Turnitin compares submitted files against its extensive database of content, and produces a similarity report and a similarity score for each

assignment. A similarity score is the percentage of a document that is similar to content held within the database. Turnitin does not determine if an instance of plagiarism has occurred. Instead, it gives instructors the information they need to determine the authenticity of work as a part of a larger process.

Please read Turnitin's Privacy Pledge, Privacy Policy, and Terms of Service, which governs users' relationship with Turnitin. Also, please note that Turnitin uses cookies and other tracking technologies; however, in its service contract with Queen's University Turnitin has agreed that neither Turnitin nor its third-party partners will use data collected through cookies or other tracking technologies for marketing or advertising purposes. For further information about how you can exercise control over cookies, see Turnitin's Privacy Policy.

Turnitin may provide other services that are not connected to the purpose for which Queen's University has engaged Turnitin. Your independent use of Turnitin's other services is subject solely to Turnitin's Terms of Service and Privacy Policy, and Queen's University has no liability for any independent interaction you choose to have with Turnitin

Statement on Academic Integrity

Academic Integrity is constituted by the six core fundamental values of honesty, trust, fairness, respect, responsibility and courage (see www.academicintegrity.org). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities <http://www.queensu.ca/secretariat/policies/senate/report-principles-and-priorities>).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1 <http://www.queensu.ca/artsci/academic-calendars/regulations/academic-regulations/regulation-1>), on the Arts and Science website (see <http://www.queensu.ca/artsci/academics/undergraduate/academic-integrity>), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Accommodations for Disabilities

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at Senate in November 2016 (see <https://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslclwww/files/files/policies/senateandtrustees/ACADACCOMMPOLICY2016.pdf>). If you are a student with a disability and think you may need academic accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more

information, including important deadlines, please visit the QSAS website at: <http://www.queensu.ca/studentwellness/accessibility-services/>

Academic Consideration for Students with Extenuating Circumstances

Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances that are beyond their control and are interfering with their ability to complete academic requirements related to a course for a short period of time, not to exceed three Friths. Students receiving academic consideration must meet all essential requirements of a course.

The Senate Policy on Academic Consideration for Students in Extenuating Circumstances was approved at Senate in April, 2017 (see <http://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslcwww/files/files/policies/senateandtrustees/Academic%20Considerations%20for%20Extenuating%20Circumstances%20Policy%20Final.pdf>)

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. Arts and Science undergraduate students can find the Faculty of Arts and Science protocol and the portal where a request can be submitted at: <http://www.queensu.ca/artsci/accommodations>. Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.