PSYC4850A: The Psychology of Choice Spring 2016

Room: L1050

Time: Tues 3:05-5:45
Website: Moodle

Instructor: David Logue

Instructor's email: david.logue@uleth.ca

Instructor's office: D858

Instructor's office hours: Thursday 1-3

TA: Christina Nord

TA's email: christina.nord@uleth.ca

TA's office: C480

TA's office hours: Tuesday 10-12

Description

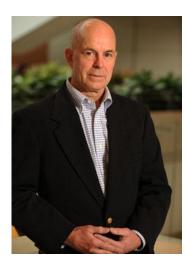
Choice is an integral component of adaptive behavior in humans, other organisms, and even computer programs. The mechanisms of choice (*how* agents make choices) have been studied, more or less independently, by many different fields including Philosophy, Psychology, Neuroscience, and Evolutionary Biology. In this seminar course, we will study choice research across disciplines, with the goal of synthesizing a coherent framework for understanding this fundamental mechanism of adaptive behavior.

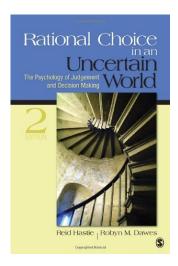
Prerequisites

4th year standing Evolution and Behaviour (Psychology 2700) Two 3000-level courses in Psychology

Book

Rational Choice in an Uncertain World by Hastie and Dawes, second edition. Buy it.







Daily schedule

- 1. **Pre-Quiz (15 min)** Each class will begin with a short quiz on the assigned chapter from Hastie and Dawes. Study the chapter carefully before coming to class. Students who arrive late will not be given extra time.
- **2. Chapter review (60 min)** We will then discuss the chapter of the week from Hastie and Dawes. One student will be assigned to be the "expert" on each section. Each student will serve as an expert four times during the semester. The expert list can be found on Moodle. Consult this list as soon as possible and note the sections for which you are responsible. The expert should be prepared to lead discussion and answer questions on *everything* in his or her section.

Experts should not summarize their section. Rather, they should lead discussion of the most important ideas by (1) stating key ideas in their own words, (1a) asking thought-provoking (as opposed to knowledge-testing or mundane) questions (2) interpreting challenging material, including graphs or mathematical formulae, and (3) suggesting connections to other ideas. Experts should come prepared with detailed notes, including several discussion questions. Their goal is to facilitate an interesting conversation, without dominating it. Each chapter will be covered in one hour, but some have more sections than others. Therefore, some expert sections will have to be covered more quickly than others. Take this into account when you are planning your expert section. I will grade experts on a 3-point scale, with up to one point awarded for each of the following categories: (1) Addressing the most important points (given the time allotted), (2) demonstrating understanding, and (3) asking thought-proving questions.

- 3. Student lectures (50 min) Over the course of the semester, each student will give two 10-minute lectures on readings that compliment the material from the textbook. The readings are on Moodle. Students will sign up for readings on the first day of class. Students must post their presentations (in Powerpoint) to Moodle before class. Ten minutes is not very long, so you'll really have to distill these down to the key points. You don't have to cover everything, but do your best to teach your peers about the most important ideas in the paper. There will a few minutes for questions after each student lecture. I exhort student lecturers to visit office hours to discuss their lectures with the TA or me beforehand. Grades on student lectures are based on presentation design (20%), teaching effectiveness (30%), and content (50%).
- **4. Discussion questions (45 min)** Groups will form, and I will give each group one or more questions to discuss. After a period of group discussion, groups will take turns presenting their answers to the class.

Participation All students can earn up to one point of participation credit each day for contributing meaningfully to the discussion, student lecture, or discussion questions. Take a lot of notes as you read the chapter so that you remember what you want to say during the discussion.

Grading Grade breakdown

25% Quizzes

25% Participation

25% Expert sections

25% Student lectures

Quizzes and student lectures are graded on a 0-100 scale. Students receive up to one point each day of class for satisfactory participation (chapter discussion and discussion questions).

Marks

| A+ > 95 | C+ = 69 - 72 |
|---------------|--------------|
| A = 90 - 95 | C = 64 - 68 |
| A = 85 - 89 | C = 60 - 63 |
| B+ = 81 - 84 | D+ = 55 - 59 |
| B = 77 - 80 | D = 50 - 54 |
| B - = 73 - 76 | F < 50 |

I reserve the right to increase all grades by a set amount (but don't count on it).

Other Course Policies

The classroom is an environment of mutual respect. Expect to treated with respect by your classmates and your professor, and understand that they expect the same from you. We are all adults who are responsible for our actions.

Make-up assignments are for promptly communicated, documented emergencies only. They will be harder than the original assignments.

Please do not use electronic devices when the professor or other students are talking or for any off-topic purpose. Discretely step out of the room if you need to use your device.

Students wishing to meet with David or Christina should do so during office hours. We will only schedule meetings outside of office hours if the student provides proof that they cannot meet during either of our office hours. (We like meeting with students, but we're both very busy, and there are a lot of you.)

Weekly scheduleThe schedule may change in response to changes to the academic calendar or if we get behind.

| Date | Topic | Chapter | Student lectures |
|--------|--|---------|--|
| Jan 12 | Probability, Deciding | Ch 1 | Syllabus, sign up for student lectures |
| Jan 19 | Decision Making | Ch 2 | Decisions in animals Bradbury & Vehrencamp 2011 279-282 (http://sites.sinauer.com/animalcommunication2e/chapter0 8.01.html) Bradbury & Vehrencamp 2011 283-286 (http://sites.sinauer.com/animalcommunication2e/chapter0 8.03.html) Chittka et al. 2009 |
| Jan 26 | A Framework for Judgment (The Lens Model) | Ch 3 | Choice in non-human animals Shafir 1994 Miller & Todd 1998 Leonard et al. 2011 |
| Feb 2 | Anchor and Adjust | Ch 4 | Cognitive sensory biases Rodd et al. 2001 Bateson & Healy 2005 Akre & Johnson 2014 |
| Feb 9 | Decision Heuristics | Ch 5 | Choice and conformity Ariely & Levav 2000 Witte & Ryan 2002 Pronin et al. 2007 |
| Feb 16 | No School | | |
| Feb 23 | Explanation- Based Judgments | Ch 6 | Hard choices Johnson 1984 Markman & Medin 1995 Logue & Forstmeier 2008 Guest lecture: John Walkey "Distinguishing Reversal Learning from Task Switching Learning" |
| Mar 1 | Chance and Cause | Ch 7 | Freedom to choose Soon et al. 2008 (see also Supplement) Brembs 2010 Dennett 2013 Ilhe et al. 2015 |
| Mar 8 | Thinking Rationally | Ch 8 | Hidden influences on preference and choice Zajonc 1968 Zajonc 1980 Berger et al. 2008 |
| Mar 15 | Preferences | Ch 9 | Evolutionary basis of preference Milinski & Bakker 1990 Ryan & Rand 1990 Sardell et al. 2014 Endler and Basolo 1998 |

| Mar 22 | From Preferences to Choices | Ch 10 | Amount of choice Redelmeier & Shafir 1995 Iyengar & Lepper 1999 Iyengar & Lepper 2000 Schwartz et al. 2002 |
|--------|-----------------------------------|-------|--|
| Mar 29 | Expected Utility Theory | Ch 11 | Violations of rationality Haidt 2001 Callander et al 2012 Lea & Ryan 2015 Guest lecture: Christina Nord, "Effort and Choice" |
| Apr 5 | Prospect Theory | Ch 12 | Frames Tversky & Kahneman 1986 Loewenstein & Prelec 1993 Johnson & Goldstein 2004 |
| Apr 12 | New Directions | Ch 13 | Collective decision making Couzin et al. 2005 Conradt & Roper 2005 Sasaki & Pratt 2011 Reid et al. 2015 |