Cognition and Decision Making

01: 185: 3XX

Logistics

- Lecture: DAY, TIME
- Recitation: DAY, TIME
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  - Office: A103 Psychology Building Annex, Busch Campus
  - Office Hours: TBA
- Teaching Assistant: TBA
  - Email: TBA
  - Office: TBA
  - Office Hours: TBA

Course Description

The subjects of reasoning and decision-making provide a means of exploring a number of issues central to the field of cognitive science. Reasoning is the ability to go beyond the information given in a situation to figure out what is going on. Decision making is the ability to select a course of action from among a set of possibilities. Understanding how people act helps us to understand fundamental problems in cognitive science such as whether people tend to act rationally. In addition, understanding how people think and decide in general can make us
as individuals better reasoners and decision makers. This course will address a range of topics, including judgment and decision making, individual choice, behavioral game theory, cooperation and altruism, among others.

The pre- or co-requisite is having successfully completed a course in computer science, linguistics, philosophy, or psychology or being assigned a permission number. This course can serve as a requirement toward the Interdisciplinary Major in Cognitive Science. This course can also be taken to satisfy the Cognitive Science minor (in place of ‘Introduction to Cognitive Science’ (185:201) and ‘Advanced Topics in Cognitive Science’ (185:411)). The minor requires a minimum of 18 credits. This course counts for 4 credits.

Course Objectives

Upon successful completion of the course, students will:

- Appreciate the interdisciplinary nature of decision science, the diversity of viewpoints, the controversies and the areas of nascent consensus.
- Know specific concepts, theories, and experimental results covered in course.
- Be able to read and discuss research papers from multiple disciplines.

Readings

There will be reading consisting of articles written on topics in the Decision and Cognitive Sciences as well as chapters from edited books. The required readings will be available on Sakai for you to download. Do not skip or skim the required readings. Your discussion questions for recitation and exams will be based on these readings and material addressed in class. There are also optional readings that may be helpful or interesting if you find yourself wanting to read more about that topic.

Evaluation

There will be a total of 1000 points possible in this course.

- Attendance/Participation (5%) (50 points): Come to class and to recitation prepared and ready to participate.
• **Quizzes (15%) (150 points):** Each Tuesday there will be a short quiz at the beginning of class. The purpose of the weekly quizzes is to briefly test your basic comprehension of the reading and to stimulate class discussion. You can miss one quiz without it affecting your grade.

• **Paper (20%) (200 points):** Each of you will be completing a research paper of 15-20 pages (double spaced, 12-point Times New Roman font, 1” margins). Papers not meeting these specifications will not be accepted or read. You will work towards completing your paper in stages. As part of this process, you will work together in an in-class peer review workshop during which you will read and provide feedback on a peer’s paper and have the same done with yours. This in-class workshop counts towards your Peer Feedback grade. **If you are absent for this class, you will receive a 0 on this component!** The paper is due via Sakai on the LAST DAY of class **Date** by 5pm. Every day that a paper a late will result in an automatic one-grade reduction.

• **Two Exams (50%) (500 points total):** Each exam will count for 25%. The midterm will cover material in the first half of the course. The final exam will cover material in the second half of the course. The exams will be take-home exams (specific instructions for completing and turning them in will be on sakai) and will consist of short answer and essay questions.

• **Extra Credit Options:** (1) I am always on the lookout for good cartoons to use as examples in class. Any student who brings a cartoon that is relevant to a point discussed in class along with a paragraph describing why it is relevant will have 5 points added to your final grade. Credit for a particular cartoon will be given only to the first student bringing in that cartoon. (2) A number of researchers in Psychology and Linguistics conduct experiments that are relevant to the material covered in this class. You have the opportunity to participate in up to 3 experiments from either the Linguistics or the Psychology participant pool for 3 points each added onto your final grade.

**Rutgers Policy on Academic Integrity**

Rutgers has a very detailed policy on Academic Integrity and Code of Student Conduct: [http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers](http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers)
Violations include cheating, fabrication, plagiarism, denying information to or misleading others, or facilitating these violations.

Students with Disabilities

Students with disabilities requesting accommodations should follow the procedures outlined at [http://disabilityservices.rutgers.edu/request.html](http://disabilityservices.rutgers.edu/request.html).

Name & Email Addresses of 2 Students

Use the space below to exchange names and email addresses of 2 students in this class that you can contact and that can contact you with questions about the course.

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings Due</th>
<th>Optional</th>
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<td>Introduction</td>
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<td>February</td>
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<td>2/4</td>
<td>What is Rationality?</td>
<td>[13]</td>
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<td>2/18</td>
<td>Judgment</td>
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<td>Individual Choice</td>
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<td>March</td>
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<td>3/4</td>
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<td>Heuristics and Biases</td>
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<td>Cooperation &amp; Altruism</td>
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<td>Paper due!</td>
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Bibliography

[1] NOTE: We may add to this list throughout the semester. There will be an updated copy of the schedule and bibliography on Sakai.


