PSYC 433 – Behavioral Decision Theory

Course Objectives

This course will introduce you to theories of judgment and decision making, and the research on which these theories are based. The course has a strong inter-disciplinary flavor; there is a close connection between the psychology of decision making and other disciplines such as economics, statistics, and moral philosophy. A major topic in the psychology of decision making is whether, or under what conditions, people deviate from normative rules of decision making that have been developed by other disciplines. Consideration of these questions leads to a more general concern with rational behavior - how does one define rationality, and to what degree do people deviate from rationality in their decisions?

Understanding how decisions are made makes it possible to develop tools and techniques that can help people make better decisions. Thus, one focus of the course will be on decision aiding procedures. We will review applications of decision theory to problems at the personal, organizational, and societal level.

You will be expected to show an understanding of the theoretical and practical issues that we discuss. Specific competencies are detailed in the description of exams, term papers, and other assignments.

Prerequisites

The only prerequisite for the course is an introductory course in psychology. However, a course in statistics is recommended, and some knowledge of cognitive psychology will be helpful. Some topics in the course make use of mathematical models. There is no mathematical prerequisite, but students should be comfortable with mathematics at the level of intermediate algebra.

Textbook


There will be additional reading assignments during the semester. Class handouts will provide information on the technical aspects of decision theory. Supplemental readings will extend the ideas that are covered in the textbook. Further details are provided in the Class Schedule and list of Reading Assignments.

Other Assigned Reading

In addition to the textbook, a number of topics will be treated in greater detail. For these topics, other readings will be assigned. Copies of these readings will be available on-line. Review questions for these special topics will help you with the readings.

The schedule page gives the date by which you must have read each assigned article. You must complete the assigned readings prior to the discussion of the readings in class.

Class Format

The course will mix lectures and class discussion. Some of the topics are rather technical, and these I will introduce with a somewhat formal lecture. Notes from these lectures will be posted on the Web. At other times, the class will be much more interactive. You are expected to ask questions, make comments and suggestions, and challenge what you have read or what I say. A portion of your final grade will be based on your in-class contributions (see Class Participation).
For each chapter in the textbook and each supplemental reading, I have posted discussion questions on the web page. You should use these discussion questions to guide your reading, and be prepared to answer the questions in class.

I recognize that some students are uncomfortable answering questions and making comments in class, but the ability to discuss reading assignments is an essential skill in upper division classes. By the end of the term I expect to have called on every student often enough that everyone can obtain the class participation credit if they have read and thought about the reading assignments.

Class attendance is not mandatory, and I shall not take roll. Of course, it is impossible for you to obtain credit for class participation if you are not in class.

Note: Details of the syllabus are subject to change as we go along. All changes will be announced on the web - see Announcements.

Web Site

The web site for the course is part of the UNC Sakai Project. You use the Sakai portal to submit assignments, and you can find information there about your grade. If you have questions about the course material, you may post them in the discussion forum.

As a registered participant in the Sakai project, you will have access to your own workspace.

Examinations

There will be two exams, a midterm (March 5) and a final (April 28). Both exams will consist of questions based on the textbook and other assigned readings. Sample test questions and review materials will be made available (see Topics for Exam 1 and Exam 2). The final exam will have a time limit of 2 hours.

If you have to miss the midterm test due to illness, personal emergency, or contractual obligation, you may take a makeup test. You must request a makeup within one week of the original test, and provide documentation for the excused absence. Please review the university's rules concerning rescheduling the final exam. In general, this can be done only with the approval of your Dean, or with notification from the student health service.

Term Paper

A significant part of the final grade will be based on a term paper. In the paper you must select any topic in cognitive science that interests you, and develop a research proposal for that topic. I will provide a list of possible topics, but you need not feel constrained by that list.
You should consult with me on ideas for your term paper. A preliminary proposal for your paper is due March 31. The proposal will not be graded, but there is a penalty for being late. See Term Papers for more information.

Outlines and papers should be submitted from the Assignments section of your Sakai Portal. Select the appropriate term paper assignment. The schedule for submitting the paper is as follows:

March 31. A brief description of the topic for your paper (Not graded, but 1 point penalty per day late).

After receiving your description, I shall try to provide you with some references and ideas that you may find helpful.

April 14. An outline of your paper, indicating your progress to date (Not graded, but 1 point penalty per day late).

This will be another opportunity for feedback and suggestions.

Friday May 1. The final version of the paper is due by midnight. Late papers will not be accepted.

The paper should be between six and ten pages long, typed double spaced, not including tables, figures, or list of references. You should feel free to consult with me at any time on the content of your paper.

Other Written Assignments

There will be six other short written assignments, roughly one every two weeks (see Other Assignments). These too should be submitted from the Assignments section of your Sakai Portal.

The assignments will test your understanding of the material by asking for examples or explanations of important theoretical concepts.

Class Participation

Read the required chapters or other assigned material by the due date and come to class prepared to the reading.

You are expected to have answers to the review questions, and to contribute actively to class discussion of the textbook and other readings. Participation credit will be based on the following criteria:
First, of course, have you been in class?
Have you answered questions when asked directly?
Have you volunteered answers to questions not directed at any one person?
Have you offered pertinent comments or questions at other times?

If you are reluctant to answer questions or state opinions in class, you may also earn participation credit by contributing to (or starting) discussions on-line using the Discussion Forum on the Sakai portal. I suggest you check with me if you want to use the discussion forum rather than speak in class.

**Grading**

Grades are based on the exams, reports, and term paper, and on your contributions to class discussions, adding up to 400 points total.

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>100</td>
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<tr>
<td>Final Exam</td>
<td>100</td>
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<tr>
<td>Answers to assigned questions, 10 points each</td>
<td>60</td>
</tr>
<tr>
<td>Term Paper</td>
<td>100</td>
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<tr>
<td>Class Participation</td>
<td>40</td>
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</tbody>
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Your final grade will be based on the total points earned during the semester. The grading scale is shown below.

<table>
<thead>
<tr>
<th>Overall Grade</th>
<th>Total Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>348-400</td>
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</tr>
<tr>
<td>A-</td>
<td>328-347</td>
<td>82%</td>
</tr>
<tr>
<td>B+</td>
<td>312-327</td>
<td>78%</td>
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<tr>
<td>B</td>
<td>292-311</td>
<td>73%</td>
</tr>
<tr>
<td>B-</td>
<td>272-291</td>
<td>68%</td>
</tr>
<tr>
<td>C+</td>
<td>256-271</td>
<td>64%</td>
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<tr>
<td>C</td>
<td>236-255</td>
<td>59%</td>
</tr>
<tr>
<td>C-</td>
<td>216-235</td>
<td>54%</td>
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<tr>
<td>D+</td>
<td>200-215</td>
<td>50%</td>
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<tr>
<td>D</td>
<td>180-199</td>
<td>45%</td>
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Campus Honor Code

The most important questions concerning the Honor Code for this course are likely to arise in connection with written reports and assignments. Please read the following carefully, and be sure you understand what is and is not considered to be acceptable and authorized help.

All research and scholarship uses and refers to research and theory published by other investigators. When you refer to the work of others you must give full credit to the original source. Cite the work in the body of the text using name and date (e.g., Gintis, 2009), and provide the complete citation in a list of references at the end, using APA format. See the handout on writing reports for examples of the format.

If you use the exact wording from a source, that text must be set in quotation marks, with an appropriate page reference. Notice, however, that in the sciences it is generally better to paraphrase the work of others, rather than quote verbatim. Use your own words rather than quote the original exactly.

Another source of confusion arises from the fact that all students will write answers to the short assignments, and you are likely to discuss your answers with others. The central principle governing written work is that, while you are free, even encouraged, to discuss your ideas with other students, the written form of your papers and reports must be your own independent work.

I use your written answers and papers as an indication of whether or not you understand what you are writing about. If your understanding comes from discussing the ideas with other students, that's all to the good. The test of your understanding, however, is your ability to express the ideas in writing. Thus, the written material (your wording of the ideas) must be your own. Do not share your written answers with others.

In other words, it is always appropriate to seek ideas and explanations from other students. It is a violation of the honor code, however, if the written expression of your understanding uses help received from others.

Notice that this principle is very similar to the principle underlying copyright laws. One cannot copyright an idea, but the expression of an idea is subject to copyright.