

Spring 2014

COURSE DESCRIPTION FOR
JUDGMENT AND CHOICE PROCESSES AND
DECISION MAKING (OR/SYST 671-002)

Instructor: Professor Leonard Adelman

Office: Long and Kimmy Nguyen Engineering Building, Room #2223

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Office Hours: Mondays, 3:30 - 4:00 (or by appointment)

Texts:

Hastie, R., & Dawes, R.M. (2010). *Rational Choice in an Uncertain World* (2nd ed.).
Thousand Oaks, CA: Sage Press.

Prerequisite: *STAT 344 and STAT 354* or equivalent or permission of instructor.

The purpose of this course is to overview the scientific literature on judgment and decision making processes. Most of the course reviews research within the context of behavioral decision theory, which has primarily been conducted within controlled, laboratory settings. The last part of the course focuses on the naturalistic decision making approach that has become prevalent in non-laboratory settings, such as the military, aviation, and nuclear industries.

There is a mid-term exam, a final exam, and a student project. I use the full grading scale, including pluses and minuses. Each of the two exams is worth 30% of your grade; the student project is worth 20%. The exams will be based on questions that I handout in class. The questions will cover material presented in the texts and class. The exams are closed-book and closed-notes. I will tell you which questions have the highest probability of being on the exams during the review period. I will not review written answers to questions prior to the exams. So, please use the review period to make sure you know the answers to questions that might be on the exams. Laptops cannot be used to take the exams.

I expect students to read the material for each week's class before the class so that they can answer questions about it. Since I will be teaching the class using a seminar format, class participation is critical to its successful implementation. Therefore, I will grade class participation after each class session. Please notify me if you are not able to attend class. You are permitted to miss 2 classes, with notification. After that, you will receive a "F" for a missed class session. Class participation is worth 20% of your grade.

The purpose of the student project is to give students an opportunity to apply what they have learned in class by conducting an experiment investigating judgment and decision making hypotheses. You are required to use statistical tests to support your conclusions. You may use material from work and/or other classes. Just make sure that I can clearly see how you are effectively applying what you have learned in this class to your selected problem. The result of the project will be a 15 minute presentation (with viewgraphs) on the last day of class.

SYLLABUS: JUDGMENT AND CHOICE PROCESSES (OR/SYST 671-002, Spring 2014)

- Week 1 (1/27) Introduction to Course: Thinking and Deciding (Chap. 1)
- Week 2 (2/3) What is Decision Making & a Framework for Judgment (Chaps 2 & 3)
- Week 3 (2/10) Anchoring & Adjustment and Judging Heuristically (Chaps. 4 & 5)
- Week 4 (2/17) Explanation-Based Judgments and Chance & Choice (Chaps. 6 & 7)
- Week 5 (2/24) Thinking Rationally about Uncertainty (Chap. 8) & Review for Mid-Term
- Week 6 (3/3) Mid-Term Exam
- Week 7 (3/10) No Class (Spring Break)
- Week 8 (3/17) Review Mid-Term and Evaluating Consequences (Chap. 9)
- Week 9 (3/24) Project Overview and From Preferences to Choices (Chap. 10)
- Week 10 (3/31) A Rational Decision Theory (Chap. 11)
- Week 11 (4/7) A Descriptive Decision Theory (Chap. 12)
- Week 12 (4/14) New Directions in Judgment and Decision Making Research (Chap. 13)
- Week 13 (4/21) In Praise of Uncertainty (Chap. 14) & RPD (handout)
- Week 14 (4/28) The RAWFS Heuristic and A Data-Frame Theory of Sensemaking (handouts)
- Week 15 (5/5) Student Presentations [turn in paper copy of viewgraphs; there is no paper]
- Week 16 (5/12) Final Exam (only on material after the mid-term)

Additional Information

- GMU is an Honor Code university
- Emails will be sent to your GMU email address
- Office of Disability Services: 703-993-2472 (<http://ods.gmu.edu>)
- Counseling & Psychological Services: 703-993-2380 (<http://caps.gmu.edu>)
- Writing Center: A114 Robinson Hall, 993-1200 (<http://writingcenter.gmu.edu>)
- University Libraries: <http://library.gmu.edu/mudge/IM/IMRef.html>