EXP 5575 (2051) Judgment and Decision Making Spring 2010 1

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Class Meets: 2:30 - 5:15 PM Tuesday Room 201 / Bldg 11

Required Text:

Plous, S. (1993). *The psychology of judgment and decision making.* New York: McGraw-Hill. ISBN-13: 978-0-07-050477-6

Readings Sets (organized by topic)
NOTE: All journal articles are available online as full text files in the UWF library data bases. Citations include the digital object identifier (doi) that is part of the new (6th edition) citation format for APA style. The doi should assist you in locating these articles in the UWF library full text data bases.

Readings that are chapters in books will be made available as PDF files in electronic reserve at the library.

Reading Set A: Historical Overviews and Developments (January 19)

Mellers, B. A., Schwartz,A., & Cooke, A. D. J. (1998). Judgment and decision making. *Annual Review of Psychology, 49,* 447-477.

Weber, E. U., & Johnson, E. J. (2009). Mindful judgment and decision making. *Annual Review of Psychology, 60,* 53-85. doi:10.1146/annurev.psych.60.110707.163633

Reading Set B: Bounded Rationality (February 16)

Gigerenzer, G. (2004). Fast and frugal heuristics: The tools of bounded rationality. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment & decision making* (pp. 62-88). New York: Blackwell Publishing.

Gigerenzer, G. (2008). Why heuristics work. *Perspective on Psychological Science, 3,* 20-29. doi: 10.1111/j.1745-6916.2008.00058.x

Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist, 58,* 697 – 720. doi: 10.1037/0003-066X58.9.697

Katsikopoulos, K. V., & Gigerenzer, G. (2008). One-reason decision-making: Modeling violations of expected utility theory. *Journal of Risk and Uncertainty, 37,* 35-56. doi:10.1007/s1166-008-9042-0

Reading Set C: Applications of Heuristics (February 23)

Ariely, D., Loewenstein, G., & Prelec, D. (2003). "Coherent arbitrariness": Stable demand curves without stable preferences. *The Quarterly Journal of Economics, 118,* 73 – 105. doi:10.1162/00335530360535153

Ariely, D., & Norton, M. I. (2008). How actions create – not just reveal – preferences. *TRENDS in Cognitive Sciences, 12,* 13 – 16. doi:10.1016/j.tics.2007.10.008

Chapman, G. B., & Johnson, E. J. (1999). Anchoring, activation, and the construction of values. *Organizational Behavior and Human Decision Processes, 79,* 115 – 153. doi:10.1006/obhd.1999.2841

Dholakia, U. M., & Simonson, I. (2005). The effect of explicit reference points on consumer choice and online bidding behavior. *Marketing Science, 24,* 206 – 207. doi: 10.1287/mksc.1040.0099

Keren, G., & Teigen, K. H. (2004). Yet another look at the heuristics and biases appoach. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment & decision making* (pp. 89-109). New York: Blackwell Publishing.

Reading Set D: Debiasing (March 2)

Larrick, R. P. (2004). Debiasing. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment & decision making* (pp. 316-337). New York: Blackwell Publishing.

Williams, A. M., & Ericsson, K. A. (2005). Perceptual-cognitive expertise in sport: Some considerations when applying the expert performance approach, *Human Movement Science, 24*, 283-307. doi: 10.1016/j.humov.2005.06.002

Reading Set E: Naturalistic Decision Making (March 16)

Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist, 64,* 515 – 526. doi: 10.1037/a0016755

Klein, G. (2008). Naturalistic decision making. *Human Factors, 50,* 456 – 460. doi: 10.1518/001872008X288385

Lipshitz, R., Klein, G., Orasanu, J., & Salas, E. (2001). Taking stock of naturalistic decision making. *Journal of Behavioral Decision Making, 14,* 331-352.

Reading Set F: Emotion and Decision Making (System 1 and System 2) (March 23)

De Martino, B., Kumaran, D., Seymour, B., & Dolan, R. J. (2006). Frames, biases, and rational decision-making in the human brain. *Science, 313,* 684 – 687. doi: 10.1126/science.1128356

Lerner, J. S., Gonzalez, R. M., Small, D. A., & Fischoff, B. (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological Science, 14,* 144 – 150. doi: 10.1111/1467-9280.01433

Masicampo, E. J., & Baumeister, R. F. (2008). Toward a physiology of dual-process reasoning and judgment. *Psychological Science, 19,* 255-260. doi: 10.1111/j.1467-9280.2008.02077.x

Sanfey, A. G., Lowenstein, G., McClure, S. M., & Cohen, J. D. (2006). Neuroeconomics: Cross-currents in research on decision-making. *TRENDS in Cognitive Sciences, 10,* 108 – 116.

doi: 10.1016/j.tics.2006.01.009

Simmons, J. P., & Nelson, L. D. (2006). Intuitive confidence: Choosing between intuitive and nonintuitive alternatives. *Journal of Experimental Psychology: General, 135,* 409-428. doi: 10.1037/0096-3445.135.3.409

Sloman, S. A. (2002). Two systems of reasoning. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment.* (pp. 379-396). New York: Cambridge University Press.

Reading Set G: Nature of Expertise (March 23)

Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist, 49,* 725-747.

Ericsson, K. A., & Lehmann, A. C. (1996). Expert and exceptional performance: Evidence of maximal adaptation to task constraints. *Annual Review of Psychology, 47,* 273-305.

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology, 77,* 1121-1134.

Weiss, D. J., & Shanteau, J. (2003). Empirical assessment of expertise. *Human Factors, 45,* 104-114.

Weiss, D. J., & Shanteau, J. (2004). The vice of consensus and the virtue of consistency. In K. Smith, J. Shanteau, & P. Johnson (Eds.), *Psychological investigations of competence in decision making* (pp. 226-240). Cambridge: Cambridge University Press.

Reading Set H: Development of Expertise

Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert Performance. *Psychological Review, 100,* 363-406.

Phillips, J. K., Klein, G., & Sieck, W. R. (2004). Expertise in judgment and decision making: A case for training intuitive decision skills. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment & decision making* (pp. 297-315). New York: Blackwell Publishing.

van Gelder, T., Bissett, M., & Cumming, G. (2004). Cultivating expertise in informal reasoning. *Canadian Journal of Experimental Psychology, 58,* 142-152.

Reading Set I: Consequences of Expertise for Decision Making

Rhodes, M. G., & McCabe, D. P. (2009). Expertise makes the world slow down: Judgements of duration are influenced by domain knowledge. *The Quarterly Journal of Experimental Psychology, 62,* 2313 – 2319. doi: 10.1080/17470210903128536

Reading Set J: Medical Decision Making

Botti, M., & Reeve, R. (2003). Role of knowledge and ability in student nurses' clinical decision-making. *Nursing and Health Sciences, 5,* 39-49.

Chapman, G. B. (2004). The psychology of medical decision making. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment & decision making* (pp. 585-603). New York: Blackwell Publishing.

Gigerenzer, G. (2009). Making sense of health statistics. *Bulletin of the World Health Organization, 87,* 567-568. doi:10.2471/BLT.09.069872

Course Description

This course will survey current theories of human judgment and decision making. Students will be introduced to both normative models of decision making (based in statistics, philosophy, psychology, and economics) and descriptive models of decision making (based on research in cognitive psychology and social psychology). The role of expertise in judgment and decision making will also be discussed. The course will include discussion of judgment and decision making under a variety of conditions of uncertainty, including aviation, diagnosis and treatment decisions in clinical psychology and medicine, forecasting, risk assessment, and evaluation of eyewitnesses and jury decisions.

Student Learning Outcomes

At the end of this course, a successful student will be able to:

- Describe the theoretical models of judgment and decision making (JDM)
- Describe and compare normative and descriptive models of JDM.
- Evaluate the empirical evidence used to support (and discount) models of JDM.
- Identify and describe the use and consequences of heuristics and biases in decision making.
- Describe naturalistic decision making models and compare these to normative models.
- Discuss the concept of risk and how estimates of risk influence decision making.
- Describe the differences between expert and novice decision makers in terms of knowledge and information processing strategies.
- Describe the development of expertise in decision making.
- Develop a detailed knowledge and understanding of theory and empirical data concerning decision making within a specific domain of knowledge.

Course Structure

The course is organized as a seminar. You will be expected to participate actively in class discussion during each meeting. Preparation for in-class discussion by reading assigned materials before class is essential. The course is divided into two sections. The first section will consist primarily of an overview of the theories and literature on judgment and decision making in general. The second section focuses on research questions, methodology, and empirical findings on a specialized topic in judgment and decision making. This semester the specialized topic is the expertise. We will discuss how expertise is defined and measures, the influence of expertise on judgment and decision making, and how individuals develop expertise within a domain.

Evaluation and Grading

Final grades will be determined by performance on three take-home essay exams and class participation. Rubrics that describe how your work on these elements will be evaluated are available on my web site.

Take-home essay exams will consist of 4-6 questions. You may use your books, class notes, and other print sources to prepare your answers. You may not consult with any other student of faculty member when preparing your responses. You will be asked to attest to your adherence to

this policy on the cover sheet of your exam answers. Exam essays must be submitted to me either electronically or in hard copy **no later than 5:00 PM** on the due date for the exam.

Format for essay exams. Prepare a cover page for your exam with your name, exam information (e.g., Essay Exam 1), class information (EXP 5575, Fall 2006), and a statement that you have adhered to the restriction to use only your books, class notes, and other print sources when preparing your answers. All answers should be typed, double-spaced, using 1 inch margins and 10-12 point font. Use a unique header that is not your name and not a header that other students might also select (like *Exam 1*) on all pages of your exam. This will ensure that I can keep all parts of an exam together during printing (if you send your exam electronically) without putting a personal identifier on each page. (I prefer to read answers without easily seeing the name of the author.) You need not answer the questions in the order asked, but your answers should appear in your final submission in the same order as the questions in the exam. Clearly identify the question number at the beginning of each response. (You do not need to reproduce the question itself.)

Responses for questions worth 5 points should be no longer than 3 pages.
Responses for questions worth 10 points should be no longer than 5 pages.
Please consult the rubric that will be used to evaluate exam essays when writing your answers and use this as a guide to self-evaluate the completeness of your answers.

NOTE: Page limits are ***upper limits*** for responses. You are not required to write a response of the maximum length to earn full credit. A clear, concise answer might be written that does not require the maximum page allowance.

Grading
Grades will be based on three take-home essay exams and class participation. These will be weighted as follows:

Take-Home Exams (3)	30% (each exam)
Quality of Class Participation	10%

Letter grades will be assigned as follows:

93% or better	A	77% to 79%	C+
90% to 92%	A-	73% to 76%	C
87% to 89%	B+	70% to 72%	C-
83% to 86%	B	60% to 69%	D
80% to 82%	B-	50% or less	F

UNIVERSITY POLICY ON ACADEMIC CONDUCT
Honesty in our academic work is vital, and we will not knowingly act in ways which erode that integrity. Accordingly, we pledge not to cheat, nor to tolerate cheating, nor to plagiarize the work of others. (UWF Student Handbook).

Academic dishonesty is a serious offense and will be taken seriously. Please refer to the UWF

Student Handbook for a list of behaviors that fall under the definition of academic misconduct. The Handbook also outlines the penalties for academic misconduct and the due process procedures that must be followed. (You may access the current Student Code of Conduct at http://www.uwf.edu/judicialaffairs. This site also houses the new Academic Misconduct Policy that went into effect on August 27, 2007.)

ASSISTANCE FOR STUDENTS WITH SPECIAL NEEDS

Students with a documented disability who require specific examination or course related academic accommodations should contact the Student Disability Resource Center (SDRC) by e-mail at sdrc@uwf.edu or by phone at (850) 474-2387.SDRC will provide the student with a letter for the instructor that will specify recommended accommodations for individual students.

WEATHER AND OTHER EMERGENCY INFORMATION

In the case of severe weather or other emergency, the campus might be closed and classes cancelled. Official closures and delays are announced on the UWF website and broadcast on WUWF-FM (88.1MHz), the official information source for the university. Any pertinent information regarding closings, cancellations, and the re-opening of campus will be broadcast. In the event that hurricane preparation procedures are initiated, the UWF Home Web Page and Argus will both provide current information regarding hurricane preparation procedures, the status of classes and the closing of the university.

Emergency plans for the University of West Florida related to inclement weather are available on the following UWF web pages:
Information about hurricane preparedness plans is available on the UWF web site:
http://uwfemergency.org/hurricaneprep.cfm
Information about other emergency procedures is available on the UWF web site:
http://uwfemergency.org/

Schedule of Lecture Topics, Assigned Readings, and Exams

Date	Lecture Topics / Exams	Assigned Reading
Jan 12	Course Mechanics Overview and theoretical background for JDM in sensory processing and cognition	Plous: Ch 1, 2, 3, & 4
Jan 19	Historical overview and recent developments	Reading Set A
Jan 26	Contextual and social influences on JDM	Plous: Ch 5, 6, 17, & 18
Feb 2	Normative & descriptive models of decision making	Plous: Ch 7, 8, & 9
Feb 9	Heuristics & biases as irrational cognition	Plous: Ch 10, 11, 12, 13, 14, 15, & 16
Feb 16	Heuristics & biases as bounded rationality **Distribute Take-Home Exam 1**	Reading Set B
Feb 22	**Take-Home Exam 1 Due (5:00 PM)**	
Feb 23	Applications of heuristics	Reading Set C
March 2	Decision traps and debiasing	Plous: Ch 19, 20, & 21 Reading Set D
	Spring Break: March 8 – March 12	
March 16	Naturalistic decision making	Reading Set E
March 23	Emotion and decision making (System 1 and System 2) **Distribute Take-Home Exam 2**	Reading Set F
March 29	**Take-Home Exam 2 Due (5:00 PM)**	
March 30	Nature of expertise	Reading Set G
April 6	Development of expertise	Reading Set H
April 13	Consequences of expertise for JDM	Reading Set I
April 20	Application: Medical decision making **Distribute Take-Home Exam 3**	Reading Set J
April 27	**Final Exam Week** **Take-Home Exam 3 Due (5:00 PM)**	