

PSY 374: Research in Judgment and Decision Making (Spring 2020)

Syllabus

Instructor: John V. Petrocelli
E-mail: petrocjv@wfu.edu
Office: 459 Greene Hall
Office phone: (336)-758-4171
Office hours: By appointment

Days: Tuesday/Thursday
Time: 2:00 – 3:15
Location: Greene Hall 311
Course website: <https://canvas.wfu.edu>

Required Text

Kim, N. S. (2018). *Judgment and decision making: In the lab and the world*. London, England: Palgrave. ISBN-13: 978113726955-3 ISBN-10: 1137269553

Course Readings

The Course Readings are assigned from the Required Text and Articles made available on Canvas; they will serve as a framework for the course. Please bring printed versions of the appropriate Course Readings to each session of class (see Readings and Schedule below). Your performance in this course is likely to reflect the effort that you put into reviewing the Course Readings.

Course Description

Theoretical and empirical examination of how people make decisions and judgments about their lives and the world, and how these processes can be improved. Prerequisites: PSY 310 or 311.

This course is designed to familiarize students with the process of conducting research in judgment and decision making. We approach topics from the perspective of a researcher who is taking a theoretical approach to understanding the dynamics of judgment and decision making. In addition, we explore the various methodological challenges that make the task of research in judgment and decision making especially challenging (e.g., field vs. laboratory research, the nature of independent and dependent variables in psychological research, ethics, and research settings).

This course is also designed to establish the “feel” of an active research lab. Doing so involves taking the process of research in judgment and decision making from the germination of a research idea through the development of a method of testing this idea. Students form small groups and work together to develop testable research hypotheses, design studies to test these hypotheses, develop materials for the studies, conduct the studies, analyze the data, and write APA-style papers presenting the outcomes of their work. This component of the class provides the experience of being an experimental psychologist (focused on a judgment and decision making topic) for at least one semester. Research projects required.

Course Design and Philosophy

This course offers you an opportunity to become familiar with research methods commonly used in experimental psychology and to develop your skills in critically evaluating psychological claims. During this course you will be exposed to how *collaborative judgment and decision making research* is typically *designed, conducted, and reported* in both written and oral presentations. You will be exposed to both classic and contemporary writings. The required Course Reading list serves as a global introduction to important issues as well as a set of specific examples that have put judgment and decision making research methods to practical use. This model of learning will be complemented with lecture and class discussion. The course will also be oriented towards a “learning by doing” approach. You should expect to devote considerable time to your Research Project: literature review, hypothesis development, design and materials, and the execution and reporting of actual research projects. You are expected to gain valuable insights and knowledge through your research experience. The work in this course may be challenging, and at times demanding, but interesting as well. Successful students review the required readings prior to lecture, come to every session of class, complete the assignments, and take an active role in their own learning and ownership of their own project. This course was intentionally limited to a small group of students. Please do not hesitate to utilize office hours or arrange other meetings as needed.

Course Objectives and Learning Outcomes

Judgment and decision making researchers, proficient in experimental design and statistics, are skilled at asking interesting and useful questions, collecting data and providing valid and reliable answers (i.e., results). Awareness of the methods and statistical techniques presented in this course improve prediction, explanation, and control of behavior. Beyond understanding, computing, and interpreting the basic descriptive and inferential statistics commonly used in judgment and decision making research, learning outcomes include:

- An understanding of empirical findings in judgment and decision making and how major research designs address different questions and hypotheses
- An ability to formulate judgment and decision making problems/questions, to determine the degree to which an explanation is supported by reasoning/empirical evidence, to perceive alternative explanations and to determine what evidence is needed to choose between them, to synthesize empirical evidence and psychological concepts, and to critically evaluate existing explanations and generate new ideas
- An ability to locate judgment and decision making research information, to design and conduct research, to use statistical techniques to analyze information, to evaluate statistical information and quality of research
- An ability to use professional (APA) writing conventions and effective written communication skills
- An understanding and appreciation for ethical issues in research related to research participants and integrity of the researcher
- A familiarity with Institutional Review Board procedures (i.e., data collection with human subjects)
- An ability to recognize the relevance of judgment and decision making to everyday life and appreciate the importance of psychological science to answering fundamental questions
- An ability to critically evaluate claims made in psychological research
- An understanding of how psychologists form questions and design experiments in ways that can test their hypotheses statistically
- An ability to compute and interpret descriptive and inferential statistics commonly used in psychology using a statistical software program (e.g., SPSS, Excel)

Student Responsibilities

Students are expected to attend each session of class and be prepared to participate. You will also participate as a Research Project group member. Students are expected to complete all course requirements, check Canvas regularly for updates on course matters, and complete a student course evaluation.

Class Discussion

The learning experience in this course will involve sharing of thoughts during class discussions (focused on the required readings). I strongly encourage you to come to class willing and prepared to voice your thoughts and opinions. Please do ask questions in class.

Grading

Your letter grade for this course is determined by the percentage of total points (600 possible) earned throughout the semester. A letter grade will be assigned on the basis of the following scale:

A+ 98.00 – 100% A 93.00 – 97.99% A- 90.00 – 92.99% B+ 88.00 – 89.99% B 83.00 – 87.99%
B- 80.00 – 82.99% C+ 78.00 – 79.99% C 73.00 – 77.99% C- 70.00 – 72.99%... F <60%

Points are earned in eight ways:

- ❖ **Article Summary and Reaction Essays (10 points each; 5 x 10 = 50 points):** Over the course of the semester, you will be assigned to write 5 two-page Article Summary and Reaction Essays using 5 separate empirical readings of your choice. I strongly encourage you to select articles that will be useful to your Research Project; in essence the articles/essays should help you in writing your Research Project Paper (see below). Essays should be double-spaced (approx. 500 words), but are not to exceed two pages (if you have more to state, reduce the font, spacing and/or margins). The

Article Summary and Reaction Essay should be divided into two sections (i.e., the Summary section and the Reaction section; 1 page each).

The *Summary section* should reflect not the facts of the article (e.g., background, method, details about the participants or procedure) but a deeper understanding of the contribution being made. This section should answer the following types of questions:

- What is the main research question of the article?
- What is the answer or conclusion that the article provides for this question?
- What evidence is used in support of this conclusion? Is this evidence sound?
- Are there specific strengths or weaknesses in the methodology, statistics or conclusions?

The *Reaction section* is not another summarization. It is intended to serve as an intellectual exercise that may take the form of an agreement, disagreement, elaboration, contrast, parallel, or critical analysis of the work selected. Here are some examples of sentences to get you started:

- "I see a contradiction between Smith's (2002) article and the section we read about..."
- "A possible experiment that could be conducted to test the hypothesis described in Smith's (2002) article involves..."
- "The theory describe in Smith's (2002) article could be used to improve productivity in work groups by..."
- "The theory in Smith's (2002) article helped me to analyze an experience that I once had in a group conflict situation that was hard for me to understand at the time..."
- "I disagree with the interpretation of the findings described in Smith's (2002) article..."
- What questions do I still have about this paper?
- What aspects of the paper remain unclear?
- Are there any other aspects of the article that draw criticism or cause concern?

- ❖ **Class Discussion and Participation (50 points):** The learning experience in this course will involve sharing of thoughts during class discussions (focused on the required readings). Come to class willing and prepared to voice your thoughts and opinions; please ask questions during class.

When reviewing Articles, ask yourself whether you find the conclusion or conclusions convincing. If so, why? Which particular data, analyses, or arguments convinced you? If not, why not? What is unclear, lacking, or outright wrong? What alternative interpretations or arguments might be plausible? Further, if you are convinced, what follows, or what applications might the conclusion have, or what experiment might be done next? If not convinced, what would be necessary (usually in the form of further observations, or experimental data) to convince you? If you find alternative interpretations or arguments more convincing, what might be done to support such interpretations or arguments?

- ❖ **Paradigm Demonstration (50 points):** This exercise will provide you with some presentation experience as well as an experiential way of learning more about experimental procedures used in judgment and decision making research today. During one session of class, you will be required to conduct a relatively informal, 15-minute demonstration/presentation of an experimental procedure (paradigm) used by researchers. This paradigm must be published within a judgment and decision making journal (such as *Judgment and Decision Making*, *Organizational Behavior and Human Decision Processes*, *Theory and Decision*, *Journal of Experimental Social Psychology*, *Personality and Social Psychology Bulletin*). It is your responsibility to find the article. Please run the idea and the paper by me at least one week prior to your Paradigm Demonstration. For this assignment, you may use an article that you have used (or plan to use) for an Article Summary and Reaction Essay assignment.

During your demonstration, you can use the entire class or a single volunteer (whichever is more feasible, given the time constraint). Focus on demonstrating the method/procedure. Afterwards, describe the hypothesis used by the researchers and a bit of background information (you do not have to use PowerPoint, but it is often helpful). Then you should briefly discuss what is typically found with the paradigm (the results). If at all possible (e.g., when the method-procedures take only a few minutes), tally and present the class results. Keep in mind that these demonstrations will be relatively informal. In the interest of time, the procedures used during class may be modified from

what is described in the paper you select. In such cases, inform the class of how the demonstration was modified from what the researchers employed. Also, be prepared to answer questions. The keys here are having fun and making the ideas memorable.

- ❖ **Institutional Review Board Application (50 points):** Normally, if you intended to submit Research Project data for publication, your group would be required to submit an application to the Wake Forest University Institutional Review Board (IRB). Because we do not intend to publish Research Project data, I will serve as a mock IRB for your application. You will be provided with an application template for this assignment. Your Research Project group is required to ask each participant in your research study to complete an Informed Consent Form. Although it may be the least exciting part of research, this exercise simulates an important part of the process that researchers must become familiar with. Keep in mind that when you complete the procedures section of the application, you are essentially writing the Method section of your Research Project Paper (see description below).

All Wake Forest University investigators and other key personnel involved in research with human participants must complete the basic CITI (Collaborative IRB Training Initiative) program before IRB approval will be granted. Complete this within the first two weeks of the course. To access the CITI modules, go to <https://www.citiprogram.org>. To get started, create a new username and password (it will not sync with your WFU account). Log in and Click "Add a Course or Update Learner Groups" → Check the box for "Human Subjects Research" and click Next → Check the circle for "Basic Course" and click Next → Check the circle for "Group 1" and click Next → Check the circle for "Stage 1. Basic Course" and click Submit.

- ❖ **Midterm Exam (100 points):** There are several conceptual, factual, and applied concepts that will be discussed in the assigned readings and during class time. The Midterm Exam is your opportunity to demonstrate your knowledge, understanding and ability to apply these concepts.
- ❖ **Final Exam (100 points):** The Final Exam is a "take-home" exam. If you have learned how to process and critique the articles assigned as class readings and the articles you read for your Research Project Paper, you will perform well on the Final Exam.
- ❖ **Research Project Paper (150 points):** By this point in your studies you should have some experience with writing research papers. Because this course is designed to simulate the work that experimental psychologists actually do (typically collaborative), you are required to complete a Research Project Paper. It is your group's responsibility to design, conduct, and report in standard written form (i.e., APA-style), an experimental research paper. A complete, final paper is likely to reach approximately 13 pages, and should include all of the sections of an APA-style manuscript: Title Page; Abstract; Introduction [2 pages - state the problem, what is it that we don't know, review relevant research, state the research question/s, state the hypotheses in conceptual/theoretical terms]; Overview of Study [1 page - briefly state what participants were asked to do and how that is relevant to testing the research hypotheses, state what the pattern of data should look like if consistent with hypotheses]; Method [2-3 pages - Participants and Design (describe sample and design, identify independent/dependent variables), Instruments, Procedure]; Results [1-2 pages]; Discussion [1 page]; References [5+]; Tables/Figures; Appendix [only include never previously published measures].

Although you must submit your own paper, I encourage you to work collaboratively. Some sections of your paper may be quite similar to another group member's paper (e.g., Method section), but I do not want to receive four copies of the same paper. Collaborate, but rely on your own writing-skills and understanding. Also, keep in mind that you will have an opportunity to evaluate the contributions of your group members and that they will have an opportunity to evaluate your own.

DATA COLLECTION: You will need to collect data for your Research Project. Under no circumstances may you recruit students enrolled in Introduction to Psychology courses for participation. These students are automatically enrolled in the SONA research participation pool and they are reserved for IRB approved studies (which our studies will not be). Students enrolled in PSY

311 or 312 are also not eligible to participate in our experiments. You will have to rely on a convenience sample of friends, family, roommates and/or acquaintances. If each member of your group gains 20 collects data from 20 participants each, you should have enough for your analysis.

- ❖ **Group Research Project Presentation (50 points):** After your paper is written and ready to submit for grading, work with your group to transform your project into a 15-minute oral presentation. It is best to use a PowerPoint presentation with a maximum of 10 slides. Make sure not to include too much information on each slide. Use bullet-points and describe your study to the audience (i.e., don't simply read your presentation from the slides). If there are 3-4 members in your group, structure the presentation by splitting it into 3-4 parts, each to be presented by a single presenter.

Whiteboard Meetings

I don't expect you and your research project group to "figure" everything out on your own. In fact, some of the earlier issues/challenges that you will face in the process of the research project may not be covered until later in the semester. You should plan on meeting with me at least once a month as a group to plan, conduct and analyze your experiment. I will supervise you in this endeavor; a 20-minute meeting once a month can be very helpful. These meetings may be held during my office hours or during a time that we can all meet outside of class. I certainly do not mind answering questions at the end of our class time, but please do not try to "hold a meeting" as everyone is leaving at the end of class.

Attendance

Class attendance will not be monitored. However, due to the participatory and interactive nature of this course, consider your attendance mandatory. One approach that we will employ during the course is a "hands on" type of experience. If you are not present, then you will not have benefited from that particular learning experience, nor will you have contributed to the collective effort of the class. Consequently, your absence will be detrimental not only to your own progress in the course, but to that of your classmates as well. Studies show that class time is the most efficient use of a student's time when it comes to learning material. Unless by reason of extenuating circumstances or participation in religious or civic observances, your attendance is expected at all times (your classmates and Group Research Project members will expect it as well).

Lecture Notes

Lecture notes are provided on Canvas. Much of the lectures will be interactive, involving class-discussion related to the topic, presentations of computer software, thought experiments, statistical demonstrations, and experimental procedure demonstrations.

Canvas

You are expected to become familiar with the Canvas academic suite <https://canvas.wfu.edu/>. Canvas is an online course environment that allows Wake Forest University faculty and students to create, integrate, and maintain web-based teaching and learning resources. Grades, announcements or course changes will be posted on Canvas.

Cheating and Plagiarism

Cheating and/or plagiarism will not be tolerated. In my courses, I've had very few problems with plagiarism, and I don't expect to. When you signed your application for admission to Wake Forest University, you agreed to live by the honor system at Wake Forest. As part of the honor system, you agreed to abstain from cheating, which includes plagiarism. You are accountable to the following from the Wake Forest University Student Handbook: "Plagiarism is a type of cheating. It includes: (a) the use, by paraphrase or direct quotation, of the published or unpublished work of another person without complete acknowledgment of the source; (b) the unacknowledged use of materials prepared by another agency or person providing term papers or other academic materials; (c) the non-attributed use of any portion of a computer algorithm or data file; or (d) the use, by paraphrase or direct quotation, of on-line material without complete acknowledgment of the source."

Cell Phones

Please make sure that your cell phone, and/or any other equipment that is likely to be disruptive and

counterproductive to learning experience, is turned off during class.

Students with Special Needs

Please let me know if you are a student with special needs such as visual impairment, hearing impairment, or a learning disability.

Contingency Plan

In the event that the university closes due to pandemic or other disaster, please review and study the required readings. Reading quizzes (distributed over Canvas, if the internet is available; or by postal mail if the internet is not available) must be completed to test your comprehension of the readings. Complete all required work (to be distributed either through Canvas, e-mail, or postal mail) listed on the schedule and send the solutions to: John Petrocelli (petrocjv@wfu.edu), if the internet is available; or if the internet is not available to: John Petrocelli, P.O. Box 7778, Winston-Salem, 27109. You will be mailed or e-mailed a midterm and final examination that should be taken closed book, without access to papers, persons, or other resources. The return date for the examination will be specified in the mailing. If the internet is available, Professor Petrocelli will be available for normal office hours by e-mail.

Disclaimer

Consider this syllabus a binding contract of your responsibilities. As with most other courses, I do reserve the right to modify the schedule as deemed necessary. Any changes made to the schedule or policies within this syllabus will be announced in class and on Canvas.

Readings and Schedule

Week/Day: Topic / Required Reading / Class Activity:

1 Jan 14/16: Introduction to Research in JDM

- Kim – Chapter 1: Introduction
- ARTICLE: Dijksterhuis & Nordgren (2006) A theory of unconscious thought
- ARTICLE: Joel et al. (2013) Romantic relationships and judgment/decision making

2 Jan 21/23: Normative and Descriptive Decision Making Models / Research Topic Ideas and Examining the Existing Literature

- Kim – Chapter 8: Expected Utility Theory
- Kim – Chapter 9: Framing Effects and Prospect Theory
- ARTICLE: Arkes & Blumer (1985). The psychology of sunk cost
- Paradigm Demonstration: Petrocelli

3 Jan 28/30: Experimental Design in JDM / Heuristics

- ASSIGNMENT DUE: 1-Page Summary of Research Topic
- Kim – Chapter 2: Availability and Representativeness
- Kim – Chapter 3: Anchoring and Primacy Effects in Judgment
- ARTICLE: Ross et al. (1975). Perseverance in self-perception and social perception
- Paradigm Demonstration: _____

4 Feb 4/6: Experimental Design in JDM / Judgments of Past and Future 1

- Kim – Chapter 4: Hindsight Bias
- Paradigm Demonstration: _____

5 Feb 11/13: Questionnaires and Surveys / Judgments of Past and Future 2

- Kim – Chapter 5: Risk Perception
- ASSIGNMENT DUE: Article Summary and Reaction Essay 1
- ARTICLE: Stone et al. (1997). Effects of numerical and graphical displays
- Paradigm Demonstration: _____

- 6 Feb 18/20: Independent Variables / Judgments of Past and Future 3**
- Kim – Chapter 6: Prediction
 - ASSIGNMENT DUE: Article Summary and Reaction Essay 2
 - Paradigm Demonstration: _____
- 7 Feb 25: Dependent Variables / Decisions**
- Kim – Chapter 7: Choice and Mental Accounting
 - ASSIGNMENT DUE: Article Summary and Reaction Essay 3
 - ARTICLE: Crawford et al. (2002). Reactance, compliance, and anticipated regret.
 - Paradigm Demonstration: _____
- 8 Mar 3/5: Conducting Research Experiments in JDM / Hypothesis Testing & Confirmation Bias**
- Kim – Chapter 12: Hypothesis Testing and Confirmation Bias
 - Midterm Exam
- 9 Mar 17/19: Ethics in JDM Research / Belief**
- Kim – Chapter 13: Belief
 - ARTICLE: Tversky & Shafir (1992). Disjunction effect in choice under uncertainty
 - ASSIGNMENT DUE: IRB Application Due
 - Paradigm Demonstration: _____
- 10 Mar 24/26: Data Collection and Preparing Data for Analyses**
- ASSIGNMENT DUE: Article Summary and Reaction Essay 4
 - Paradigm Demonstration: _____
- 11 Mar 31/Apr 2: Statistics in Judgment and Decision Making Research**
- Dunn (2013) Chapter 11 – Data Analysis
 - ASSIGNMENT DUE: Article Summary and Reaction Essay 5
 - Paradigm Demonstration: _____
- 12 Apr 7/9: Statistics in Judgment and Decision Making Research**
- Dunn (2013) Chapter 11 – Data Analysis
- 13 Apr 14/16: Contributing and Communicating Empirical Knowledge**
- Dunn (2013) Chapter 12 - Presenting Social Psychological Research
 - Writing Results
 - APA-Style
- 14 Apr 21/23: Group Research Project “Status Report” and Data Analysis**
- Data Analysis
 - Writing Results
- 15 Apr 28: Preparation of Group Research Project Presentations**
- Data Analysis
 - Writing Results
 - Final Exam Due
- 16 May 8: Final Meeting: Friday May 8, 9:00am**
- Group Research Project Presentations
 - ASSIGNMENT DUE: Research Project Paper