

Psychology 271: Judgment and Decision Making

Fall 2019

Tuesday, Thursday 3:10-4:30 in Hegeman 204

Instructor: Kristin Lane (lane@bard.edu)

Office Hours: **Monday 1:30-3:30** (sign up on Moodle) and by appointment
106 Preston



What career will you choose? Is the person across the street likely to be a criminal? How do public policies affect decisions to save for retirement, seek preventive medical care, or conserve environmental resources? John F. Kennedy captured a truth about human decision making when he noted that “[t]he essence of ultimate decision remains impenetrable to the observer - often, indeed to the decider himself.” In this course, we will heed Kennedy's reminder that conscious reflection and verbal report often lead to inaccurate descriptions of the causes of our judgments and decisions. Our focus will be on trying to ascertain the underlying causes of these mental processes by relying on contemporary research in fields such as psychology, neuroscience, economics, and political science that offer the systematic study of how people make decisions given limited time and vast uncertainty. Sources will include empirical articles as well as review papers, videos, and case studies. We will consider applications of this work to domains such as finance, politics, the environment, and medicine.

Goals

By the end of the semester, you should:

1. Understand different models of judgment and decision making and understand specific decision-making processes;
2. Appreciate how scientific knowledge can be used in individual and public policy decisions;
3. Have improved your facility with reading empirical research; and
4. Have increased your effectiveness in oral and written communication.

Materials

Readings are posted on Moodle and must be printed out and brought to class. I suggest you buy a three-ring binder to keep these readings organized. Go to <http://moodle.bard.edu> and sign up using enrollment key **anchoringF19** (case-sensitive).

Attendance

Class is most engaging and learning happens best when we have a full, prepared group of students. As such, attendance will be noted and excessive absences will influence your grade. Please be on time - Late arrivals are disruptive, and consistent patterns of lateness will detract from your grade.

Plagiarism

Academic integrity is the foundation of your work and learning, and we will take it seriously this semester. In its most identifiable form, plagiarism represents copying someone else's words. This kind of offense is rare. More common are other integrity violations. Use of someone's ideas, arguments (including structure of their work), or words without citing them constitutes plagiarism. Unless explicitly stated otherwise, work independently on every assignment. Violations of academic integrity will at least result in loss of credit for the assignment, and may result in failure in the class. You are responsible for understanding and following the College's policies on academic integrity described in the Student Handbook: <https://www.bard.edu/dosa/handbook>

Assignments

Late written assignments will immediately lose 15% of their point value, and an additional 10% every 24 hours beyond the original deadline.

Technology

Please silence your cell phones before class. No laptop computers will be allowed without documented accommodation. If you text or access non-course materials during our class time, you are mentally absent from class, which will be treated just as a physical absence.

Inclusivity

I look forward to working together to create a respectful, collaborative environment that incorporates and respects variability in our backgrounds and beliefs. Students entitled to academic accommodations should discuss them with me within the first few weeks of the semester. Please work with Amy Shein (ahsein@bard.edu) regarding documentation for needed accommodations.

Requirements

Class Participation

Participation from everyone is crucial. The most participation need not be the best participation. Come to class prepared to discuss the readings and topics. Class participation consists both of thoughtful speaking and careful listening - you should also respond with thought to your classmates' comments. If you are uncomfortable speaking in classes, please talk to me early in the semester to discuss ways to help you succeed. Occasionally I will ask you to complete a small assignment in preparation for class, and consistent completion of these assignments will count toward your participation grade. We will also conduct several case studies in class, and your contributions to them will be factored into your participation grade. **50 points.** (1, 2, 3, 4)

Heuristics & Biases Presentation

In groups, you will creatively demonstrate a bias or heuristic. This presentation can take many forms – a skit, a movie, a song, etc. – as long as it clearly defines, illustrates, and explains the effect. You do not need to describe the specific studies in your paper, but your presentation should make clear *why* the effect occurs in addition to describe *what* the effect is. Presentations should be 10-15 minutes long. You should also be prepared to answer questions about the article. **35 points.** (1, 3, 4)

Journals

It is difficult not to see the principles of the class in the behavior of yourself and others. You will write three journal entries relating the material to your own experiences. These entries should show diversity of experience and of content. See more details at the end of the syllabus. **15 points each (45 points total).** (1, 2, 4)

Papers

You will complete two papers for the class. More details on both papers are at the end of the syllabus. **Midterm paper 40 points; Final paper 80 points.** (1, 2, 3, 4)

Exams

There will be two non-cumulative examinations. They will consist of multiple-choice, short answer, and essay questions, and will be closed-book. Make-up exams will be 1 hour and 20 minute oral exams covering the material, and only offered with a written excuse from the Dean of Students. **75 points each (150 points total).**

Grading

Grading is on a 400-point scale. Grades will be assigned based on total points earned within the following ranges – pluses and minuses will be assigned at the top and bottom of each range.

	POINTS EARNED	GRADE	POINTS EARNED	GRADE
Heuristics and Biases Presentation	360 or greater	A	280-319.9	C
Midterm Paper				
Three Journals	320-359.9	B	260-279.9	D
Participation				
Exam 2			Below 260	F
Exam 1				
Final Paper				

Due Dates

Journal 1	Sunday, September 29**	Journal 2	Sunday, November 10**
Heuristics & Biases Presentation	Tuesday, October 8	Journal 3	Sunday, December 8**
Exam 1	Thursday, October 17	Exam 2	Thursday, December 12
Paper 1	Sunday, November 3**	Paper 2	Thursday, December 19**

**Due to Moodle by 11:55pm

SCHEDULE AND READING LIST

TUESDAY, SEPTEMBER 3 – INTRODUCTION

No reading

THURSDAY, SEPTEMBER 5 – BIG IDEAS: DUAL SYSTEMS

Sanfey, A. G., & Chang, L. J. (2008). Multiple systems in decision making. *Annals of the New York Academy of Sciences*, 1128, 53–62.

Lerner, J. S. (2019). Decision science meets national security: A personal perspective. *Perspectives on Psychological Science*, 14(1), 96–100.

TUESDAY, SEPTEMBER 10 – RESEARCH METHODS IN PSYCHOLOGY

Aronson, E. A., Wilson, T. D., Sommers, S. R. (2019). *Social psychology* (10th ed.). New York: Pearson. Chapter 2, pp. 23-33.

THURSDAY, SEPTEMBER 12 – RESEARCH METHODS IN PSYCHOLOGY

Aronson, E. A., Wilson, T. D., Sommers, S. R. (2019). *Social psychology* (10th ed.). New York: Pearson. Chapter 2, pp. 33-end.

TUESDAY, SEPTEMBER 17 – READING EMPIRICAL ARTICLES

Jordan, C. H. & Zanna, M. P. (1999). How to read a journal article in social psychology. In R. F. Baumeister (Ed.), *The Self in Social Psychology* (pp. 461-470). Philadelphia: Psychology Press.

QALMRI (Adapted from: Kosslyn, S.M. & Rosenberg, R.S. (2001). *Psychology: The brain, the person, the world*. Boston: Allyn & Bacon.)

McGraw, A. P., Davis, D. F., Scott, S. E., & Tetlock, P. E. (2016). The price of not putting a price on love. *Judgment and Decision Making*, 11(1), 40-47.

THURSDAY, SEPTEMBER 19 – BOUNDED RATIONALITY AND THE LIMITS OF INTROSPECTION

Simon, H. (1972). Theories of bounded rationality. In *Decision and organization*. (pp. 161-171). Amsterdam: North-Holland Publishing Company.

Maccoun, R. (2002). Why a psychologist won the Nobel Prize in economics. *American Psychological Society Observer*, 15.

Appelbaum, B. (2017, October 9). Nobel in Economics is awarded to Richard Thaler. *New York Times*.

Wilson, T. (2002). *Strangers to ourselves: Discovering the adaptive unconscious*. Cambridge, MA: Harvard University Press. Chapter 8: Introspection and Self-Narratives until p.175; pp. 175-end optional.

TUESDAY, SEPTEMBER 24 – PROBABILITY AND FREQUENCY JUDGMENTS

Belkin, L. (2002, August 11). The odds of that. *New York Times*.

Fiske, S. T., & Taylor, S. E. (2016). *Social cognition: from brains to culture*. Boston: McGraw-Hill Higher Education. Selections from Chapter 7.

Schmidt, H. G., Mamede, S., Van Den Berge, K., Van Gog, T., Van Saase, J. L., & Rikers, R. M. (2014). Exposure to media information about a disease can cause doctors to misdiagnose similar-looking clinical cases. *Academic Medicine*, 89(2), 285-291.

THURSDAY, SEPTEMBER 26 – ANCHORING AND ADJUSTMENT

Assignment Due: Journal 1 (Sunday, September 29 by 11:55pm to Moodle)

Bahník, S., Englich, B., & Strack, F. (2017). Anchoring effect. In Pohl, R. F. (Ed.) *Cognitive Illusions: Intriguing Phenomena in Thinking, Judgment, and Memory* (2nd ed., pp. 223–241). Hove: UK: Psychology Press.

Englich, B., Mussweiler, T., & Strack, F. (2006). Playing dice with criminal sentences: The influence of irrelevant anchors on experts' judicial decision making. *Personality and Social Psychology Bulletin*, 32, 188-200.

TUESDAY, OCTOBER 1 – PROSPECT THEORY

Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux. CHAPTERS 25 AND 26.

DeMartino, B., Kumaran, D., Seymour, B., Dolan, R.J. (2006). Frames, biases, and rational decision making in the human brain. *Science*, 13, 684-687.

THURSDAY, OCTOBER 3 – FRAMING/ CATCHING UP

LISTEN to (and take notes on) the following podcast: Banaji, M. R. & Kang, O. (creators and developers). (September 27, 2017). Outsmarting Human Minds [The endowment effect] Retrieved from <https://outsmartinghumanminds.org/module/the-endowment-effect/>.

Morewedge, C. K., & Giblin, C. E. (2015). Explanations of the endowment effect: An integrative review. *Trends in Cognitive Sciences*, 19(6), 339–348.

Lakshminarayanan, V. R., Chen, M. K., & Santos, L. R. (2011). The evolution of decision-making under risk: Framing effects in monkey risk preferences. *Journal of Experimental Social Psychology*, 47, 689–693.

Halzack, S. (2016, January 22). The surprising psychology of shoppers and return policies. *Washington Post*.

TUESDAY, OCTOBER 8 – STILL MORE HEURISTICS AND BIASES

In groups of 2-3 people, you will present one of the biases or heuristics described in the following articles. (You only need to read the article that is relevant to your group.)

<u>The hindsight bias</u>	Fischhoff, B. (1975). Hindsight ≠ foresight: The effect of outcome knowledge on judgment under uncertainty. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 1, 288-299.
<u>Sunk cost</u>	Arkes, H. R., & Blumer, C. (1985). The psychology of sunk cost. <i>Organizational Behavior and Human Decision Processes</i> , 35, 124-140.
<u>Counterfactual thinking</u>	Medvec, V. H., Madey, S. F., & Gilovich, T. (1995). When less is more: Counterfactual thinking and satisfaction among Olympic medalists. <i>Journal of Personality and Social Psychology</i> , 69, 603-610.
<u>False consensus</u>	Ross, L., Greene, D., & House, P. (1977). The “false consensus effect”: An egocentric bias in social perception and attribution processes. <i>Journal of Experimental Social Psychology</i> , 13, 279-301.
<u>The halo effect</u>	Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious alteration of judgments. <i>Journal of Personality and Social Psychology</i> , 35, 250–256.
<u>The bias blind spot</u>	Pronin, E., Lin, D. Y., & Ross, L. (2002). The bias blind spot: Perceptions of bias in self versus others. <i>Personality and Social Psychology Bulletin</i> , 28, 369-381.

THURSDAY, OCTOBER 10 – CASE STUDY: CARTER RACING

Read the material distributed in the last class and decide whether you would recommend proceeding with the race. Prepare a one page summary of your recommendation and reasoning (to be handed in). Come prepared to discuss your decision with a small group and the class as a whole.

TUESDAY, OCTOBER 15 – NO CLASS, FALL BREAK

THURSDAY, OCTOBER 17 – EXAM 1

TUESDAY, OCTOBER 22 – “NUDGING”

Sunstein, C.R. (2016). The council of psychological advisers. *Annual Review of Psychology*, 67, 713-737.
Bell, C. (2013, February 11). Inside the coalition’s controversial “Nudge Unit.” The Telegraph. Retrieved from <http://www.telegraph.co.uk/news/politics/9853384/Inside-the-Coalitions-controversial-Nudge-Unit.html>

THURSDAY, OCTOBER 24 – TIME I

Surowiecki, J. (October 11, 2010). Later: What does procrastination tell us about ourselves? *The New Yorker*.
Eckert, M., Ebert, D. D., Lehr, D., Sieland, B., & Berking, M. (2018). Does SMS-support make a difference? Effectiveness of a two-week online-training to overcome procrastination. A randomized controlled trial. *Frontiers in Psychology*, 9.
Rogers, T., Milkman, K. L., John, L. K., & Norton, M. I. (2015). Beyond good intentions: Prompting people to make plans improves follow-through on important tasks. *Behavioral Policy & Science*, 1(2), 33–41.

TUESDAY, OCTOBER 26 – TIME II

Berns, G., Laibson, D. and Loewenstein, G. (2007). Intertemporal choice—toward an integrative framework. *Trends in Cognitive Science*, 11, 482-488. Do not need to read box “Modeling Preference Reversals”
Lerner, J. S., Li, Y., & Weber, E. U. (2013). The financial costs of sadness. *Psychological Science*, 24(1), 72–79.
Hershfield, H. E. (2011). Future self-continuity: How conceptions of the future self transform intertemporal choice. *Annals of the New York Academy of Sciences*, 1235(1), 30–43.

THURSDAY, OCTOBER 31 – NO CLASS (KRISTIN OUT OF TOWN)

Assignment Due: Paper 1 (Sunday, November 3 by 11:55pm to Moodle)

TUESDAY, NOVEMBER 5 – MORAL DECISION MAKING I

Complete the Moral Foundations Questionnaire – Revised at yourmorals.org – before class

Pinker, S. (2008, January 13). *The moral instinct*. New York Times.

Greene, J.D., Sommerville, R.B., Nystrom, L.E., Darley, J.M., & Cohen, J.D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293, 2105-2108.

Van Bavel, J. J., FeldmanHall, O., & Mende-Siedlecki, P. (2015). The neuroscience of moral cognition: From dual processes to dynamic systems. *Current Opinion in Psychology*, 6, 167–172.

THURSDAY, NOVEMBER 7 – MORAL DECISION MAKING II

Assignment Due: Journal 2 (Sunday, November 10 by 11:55pm to Moodle)

Bonnefon, J.-F., Shariff, A., & Rahwan, I. (2016). The social dilemma of autonomous vehicles. *Science*, 352(6293), 1573–1576.

Kern, M. and Chugh, D. (2009). Bounded ethicality: The perils of loss framing. *Psychological Science*, 20, 378-384.

Tetlock, P.E. (2003). Thinking about the unthinkable: Coping with secular encroachments on sacred values. *Trends in Cognitive Science*, 7, 320-324.

TUESDAY, NOVEMBER 12 – GROUP DECISION MAKING

Baron, R. A., & Branscombe, N. R. (2012). *Social psychology* (13th ed.). Boston: Pearson. CHAPTER 11 (Selections).

THURSDAY, NOVEMBER 14 – BEHAVIORAL SCIENCE IN ACTION (GUEST SPEAKERS)

Assignment Due: Our speakers today are Bard alumni working at ideas42 (ideas42.org) and MDRC (mdrc.org), where they (as ideas42 puts it) “[use] behavioral science for social good.” Spend some time on each organization’s website before class, and generate at least one question for our guest speakers.

TUESDAY, NOVEMBER 19 – NO CLASS (PSYCHOLOGY BOARD DAYS)

THURSDAY, NOVEMBER 21 – NEGOTIATIONS I

No reading. Come to class prepared to negotiate with a classmate.

TUESDAY, NOVEMBER 26 – NEGOTIATIONS II

Bazerman, M.H. & Moore, D. (2013). *Judgment in managerial decision making (8th Edition)*. Hoboken, NJ: John Wiley & Sons, Inc. Chapters 10 and 11 (Negotiations)

THURSDAY, NOVEMBER 28 – NO CLASS (THANKSGIVING)

TUESDAY, DECEMBER 3 – CASE STUDY: MOUNT EVEREST

Roberto, M. A., & Carioggia, G. M. (2003). Mount Everest – 1996. *Harvard Business School*. Read carefully and come to class prepared to discuss in detail.

Narula, S. K. (2019, May 31). My trip to Mount Everest almost killed me. I still want to go back. *Washington Post*.

THURSDAY, DECEMBER 5 – IMPROVING DECISION MAKING

Assignment Due: Journal 3 (Sunday, December 8 by 11:55pm to Moodle)

Bazerman, M.H. & Moore, D. (2013). *Judgment in managerial decision making (8th Edition)*. Hoboken, NJ: John Wiley & Sons, Inc. Chapter 12: Improving Decision Making

Bring the Mt. Everest (1996) case with you to class.

TUESDAY, DECEMBER 10 – WRAP UP AND REVIEW

THURSDAY, DECEMBER 12 – EXAM 2

DECEMBER 17 AND DECEMBER 19 – NO CLASS (COMPLETION DAYS)

Assignment Due: Paper 2 (Thursday, December 19 by 11:55pm to Moodle)

Meet with Kristin about final paper as needed

GUIDELINES: JOURNAL ENTRIES

(Adapted from materials available at http://www.haverford.edu/psych/ble/teaching/psy224/sp_journal_f2009.pdf and <http://www.umich.edu/~psychol/380/sommers/005journal.html>)

Three times during the semester, you should select a process, phenomenon, theory, or psychological tendency from the course content and connect it to an experience from your own life. The body of each entry should begin with a description of an event or interaction in your life in four or five sentences. A page-long story about how you spent your weekend is too long, and one line reading, "I went out with my friends" is insufficient. You should pick a specific event or interaction and describe it in enough detail so that your subsequent discussion will make sense to someone who was not there. Next you should describe how the specific topic you have chosen is relevant to this event. You should be very specific and clear with your terms.

Each entry should be approximately 250 words – less than 200 is probably too short, and more than 400 is too long. These are relatively informal writing exercises, but you should still follow the rules of basic grammar, and be sure to spellcheck and proofread your work.

The following prompts may help you get started. Do not feel bound to only answer these questions. Similarly, do not feel like you must answer all of these questions in a single entry.

- How can the phenomenon you have chosen be seen in this interaction?
- How does your current awareness of this phenomenon change the way you interpret what happened during this event?
- If you (or others) had been aware of research about this phenomenon during the event, how might the outcome of the interaction have been changed?
- How will your learning about this phenomenon influence your attitudes/behavior/perceptions in the future?
- What questions do you now have after considering the event in light of psychological theory?
- What type of experiment(s) might help address these issues?
- If your interaction was not consistent with your chosen principle:
 - How was it inconsistent?
 - Why do you think the outcome of this interaction seems to be inconsistent with the phenomenon you chose?
 - What aspects of the situation, if changed, would have resulted in a less surprising outcome?
 - What type of experiment(s) might help answer these questions?

Grading

Journals are graded on a $\checkmark+$ / \checkmark / $\checkmark-$ scale. Journals that accurately describe the principle and apply it in a thoughtful way will earn a \checkmark (most journals will earn this grade); particularly creative journals that integrate theories, show unusual insight, or offer novel combinations of ideas will earn a $\checkmark+$; journals that misapply the material or offer only a perfunctory or inaccurate synopsis or analysis will earn a $\checkmark-$.

MIDTERM PAPER

In the midterm paper you will be considering the application of the principles we've discussed to change behavior. This approach, which has come to be known as "nudging," has gained traction as a way of using principles from the mind and behavioral sciences to guide people toward more desirable behaviors. The guidelines for the assignment are below – follow them carefully and come speak to me if you have any questions or want to discuss your paper. You can, but do not need to, complete outside research to complete the paper.

1. The paper is due on **Sunday, November 3.**
2. Reread the articles on Nudging that we read for the relevant class:
 - a. Bell, C. (2013, February 11). Inside the coalition's controversial "Nudge Unit." The Telegraph. Retrieved from <http://www.telegraph.co.uk/news/politics/9853384/Inside-the-Coalitions-controversial-Nudge-Unit.html>
 - b. Sunstein, C.R. (2016). The council of psychological advisers. *Annual Review of Psychology*, 67, 713-737.
2. Open the paper by defining a "nudge" and explaining how nudges work in your first few paragraphs in your own words.
3. In *The council of psychological advisors* Sunstein summarizes (in the table on page 718) a host of psychological and behavioral principles that are used in nudges, and offers some examples of nudges that can be used by drawing on these principles. He then expands on a few of these in the text: *Default Rules*, *Requiring Active Choosing* and *Social Norms and Conformity*. Pick one of these three ideas and summarize the psychological principle involved, and describe a nudge that has been used using this principle. This section should be approximately three paragraphs.
4. Pick one of the interventions below and do the following:
 - a. Summarize the program. (Two to three paragraphs)
 - b. Describe the psychological principles underlying the program (two to three paragraphs).
 - c. Using concepts, ideas, and skills that you have gained this semester, evaluate the program. This section should be detailed, specific and thorough (approximately three or four paragraphs).
 - d. Interventions to choose from:
 - i. New York City Summons Redesign. Here be sure to read about the project following the links on the [project page](#) and to refer to the images of the [before and after summons forms](#).
 - ii. Reframing HIV risk in South Africa. [Project brief](#) and [longer project description](#).
 - iii. Increasing college retention. [Project description](#).
5. Identify a behavior that you would like to change at Bard. (This section of the paper will probably be about three to four pages.)
 - a. Describe the behavior, and provide informed speculation about its causes.
 - b. Identify the potential psychological processes that might be involved in the behavior.
 - c. Design your own "nudge" that you could do at Bard to address this problem. Here you should be specific, thorough, and detailed both in describing the psychological principles you are drawing on, and in explaining why you think your nudge will improve things.
 - d. Describe how you will determine if your nudge is effective. That means you should have some directly observable and measureable behavior and a plan to measure whether or not your nudge has been effective (which necessitates some kind of comparison).

FINAL PAPER

Our class has students from many backgrounds and with diverse interests. My goal for the final paper is for you to explore your interests in the context of the class material. To that end, there are several options for the final paper, and within each one, quite a bit of choice about the domain. There are several common features and grading criteria:

- You will apply the course material to a novel situation (or person).
- You will analyze this situation or person in light of the theories and evidence we have explored this semester.
- You will consider how your analysis opens up avenues for research, and pose a research question that is testable with an empirical study or quantitative data.
- Papers will contain between 4-6 pages of careful analysis of the course material. Final papers will be somewhere between 6-12 pages; this wide range reflects the variability in how much time and space will be required to present background information to the reader.
- Papers should be double-spaced and carefully proofread, with page numbers in the upper right hand corner of each page.
- All papers should use APA Style for in-text citations and end References. (A handout is on Moodle with these details.)

Grading criteria

- Does the paper meet the guidelines?
- Does the writer demonstrate analysis and application of the course material that goes beyond what we have discussed or covered in class? Is such analysis accurate?
- Is the author's logic clearly developed and articulated?
- Is the paper well-written? (e.g., Is prose straightforward and easy to follow? Do ideas connect naturally? Is it well-organized? Has it been proofread carefully?)

Option 1: Interview With a Decision Maker

- 1. Choose a decision maker.** Identify someone for whom making clearly-defined decisions is a major, if not central, part of their professional role, and is willing to speak with you for 45 minutes to one hour. Although all employees make decisions in some form, the key notion here is that the decisions are discrete and a primary focus of the job. **If you choose this option, you must email me a one-paragraph précis describing your plans by April 17.** In this proposal, identify the person you plan to interview, and explain how making decisions is a central part of their job. Also indicate if you have contacted and the person and received permission to be interviewed.
- 2. Prepare for your interview.** Your pre-interview research should familiarize you with the kind of decisions your interviewee's career entails. Sources for this will vary, but may include statistical overviews of the profession, published interviews with members of the profession, popular media or academic work. Based on your research, identify specific issues from class that might be relevant to your interviewee's experience. Generate a list of questions that you plan to ask your interviewee that connect the particular job to the course material.
- 3. Conduct the interview.** Begin by asking the interviewee to describe their profession, and the major decisions the job presents. Ask the interviewee to describe, in detail, a decision that was particularly difficult and/ or memorable. Probe for information that elucidates the underlying decision making process. Be sure to ask the questions that you generated in Step 2. **BE SURE TO TAKE NOTES.**
- 4. Write the paper.** Your final paper should be a synthesis of material from the class and what you discovered in your interview. Your final report should contain the following elements:
 - a. Describe both the person you interviewed and the relevant profession thoroughly. Relate any characteristics of the job that are relevant to the decision-making process. Explain why you chose this person for your project. *1-2 pages.*

- b. Describe the specific incident that you discussed with your interviewee. *1 page.*
- c. Analyze and integrate what you learned from your interviewee with the course material. You should address between 3-5 different course topics in this section. For example: Did their behavior illustrate (or contradict) a particular decision-making process that we've discussed? Make clear that you understand the concepts and evidence from the course – explain them to the reader. *3-4 pages*
- d. What did you learn from the interview about decision making? Connect this back to the empirical study of decision making by proposing a direction for future research. This section does not need to include a fully-fleshed out study, but it should pose a specific research question that could be tested with social scientific methods and quantitative data. State a hypothesis about the answer to this question, and explain your logic. *1-2 pages*
- e. Include an Appendix with the questions you generated during your interview preparation and copies of the notes from your interview.

Option 2: Case Study Creation

1. **Choose a situation.** Identify a specific situation that illustrates some processes that can lead people to use suboptimal decision making processes. The scenario can be a real life situation, a modification of a real life situation, or a situation that you create. Use this information to create a case study of the kind we will encounter in class (e.g., Carter Racing). Your goal is to create a situation in which a participant could take part in an experience that illustrates properties of decision making.
2. **Your paper should have the following components:**
 - a. *Participant experience.* In this part of the paper, you will create materials of the kind used in Carter Racing. This information should give the case-study participant 1. background on the situation he or she is facing; 2. relevant information or data needed to make the decision required; 3. information and data required to make a decision. *3-6 pages (intentionally wide because this may vary a great deal based on topic)*
 - b. *Case study analysis.* In this part of the paper, you should analyze the case that you created. Think of this part of the paper as being “field notes” for a teacher who plans to use this case in class. Is there an objectively “right” answer based on the data given to case study participants? Are there particular decision making processes that you think will affect participants as they work through the case study? This section of the paper should be clear and detailed – define and explain each process. Elucidate very clearly how each one may influence decision making as participants work through the case study. You should engage with between 3-5 different course topics in this part of the paper. *3-4 pages*
 - c. What open questions does this case highlight about decision making? Connect this back to the empirical study of decision making by proposing a direction for future research. This section does not need to include a fully-fleshed out study, but it should pose a specific research question that could be tested with social scientific methods and quantitative data. State a hypothesis about the answer to this question, and explain your logic. *1-2 pages*

Option 3: Situation Analysis

1. **Choose a situation.** Identify a situation from real life in which people used suboptimal decision making processes. This situation should be specific; for example, rather than analyze “factors that contributed to the economic collapse” you might analyze “factors that led to the issuance of many sub-prime loans prior to the economic collapse.” You can think of this assignment as being akin to the “Mount Everest” case study we will do in class, in which we apply principles of the course to a novel, specific situation. Your chosen situation should be a complex and public occurrence rather than something from your personal life.
2. **Research the situation.** You should gain a nuanced understanding of the facts of the event. What happened? Who was involved? What were the primary contributing factors to the event? Sources should be mainstream research and media outlets (e.g., academic journals, newspapers, public data of high quality, interviews with people involved, etc.). You should become an expert in the situation.

3. Your paper should have the following components:

- a. Describe the situation to the reader in detail. Assume that the reader is not an expert in the situation – your summary should be thorough, non-technical, and fair. *2-3 pages*.
- b. Analyze the situation given the course material we have covered. Are there particular decision making processes that you think affected the outcome of the situation? This section of the paper should be clear and detailed – define each process and explain it. Elucidate very clearly how each one may have influenced decision making in this situation. You should engage with between 3-5 different course topics in this part of the paper. *3-4 pages*
- c. What open questions does this example highlight about decision making? Connect this back to the empirical study of decision making by proposing a direction for future research. This section does not need to include a fully-fleshed out study, but it should pose a specific research question that could be tested with social scientific methods and quantitative data. State a hypothesis about the answer to this question, and explain your logic. *1-2 pages*