

PSY 230: Cognitive Psychology Spring 2019

11:50 a.m. – 1:10 p.m. Mondays and Wednesdays in RKC 101

Instructor

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Office hours: Monday 1:30 – 2:30 p.m., Thursday 3:00 p.m. – 4:00 p.m., or by appointment

COURSE DESCRIPTION

Cognitive psychology is the study of mind: how we perceive the world, remember, represent knowledge, acquire new information, become aware of our emotions, make plans, reason, and use language. In this course, we examine the empirical foundations that determine our understanding of mind, including classic research designs, recent advances in computational modeling, philosophical perspectives, and changes in cognition throughout the lifespan.

REQUIRED MATERIAL

Reisberg, D. (2016). *Cognition: Exploring the Science of the Mind* (6th ed.). New York: W. W. Norton Publishers.

All non-textbook reading assignments are listed on the course schedule at the end of this syllabus. All non-textbook readings are available through the course's Moodle site (**enrollment key: Cognition**). You can sign up for the course Moodle site at <http://moodle.bard.edu>.

You are also required to purchase access to ZAPS, the Norton Psychology Labs. Access can be obtained through the following link: <https://digital.wwnorton.com/cognition7>.

COMPONENTS OF THE COURSE GRADE

Exams (300 points)

For this class, there will be 3 exams. Exam dates are firm but the material covered may vary slightly from the syllabus depending on how the course progresses. Any deviations from the syllabus will be made clear prior to each exam. Exams will contain fill-in-the-blank and short answer questions encompassing material covered in class and the assigned readings. Exams will be worth 100 points each. The third exam will be cumulative but the majority of the material (~75%) will be from topics presented after the second exam. Students are expected to take all exams on the schedule dates. In an extreme circumstance, the student should contact me at least 24 hours prior to the exam and I will decide on what will be done. Make up exams will only be scheduled with a written excuse from the Dean of Students or medical professional.

ZAPS Labs (40 points).

Over the course of the semester you will be expected to complete 8 Zaps labs. Each of these labs should be completed by the date listed on the schedule at the end of the syllabus. Each lab is worth 5 points. Failing to complete a lab by the deadline will result in a grade of zero for that lab. There will be a total of 9 labs assigned over the course of the semester. Your lowest grade will be dropped.

ZAPS LABS Presentation (20 points)

Once over the course of the semester, your group will be required to present the results of a ZAPS lab to the class. This presentation will include a brief background on the lab, the specific methodology, and predictions. During the presentation, your group will be presented with the class results and asked to explain the results to the class.

Class Participation and in-class assignments (40 points)

You should come to class each day prepared to discuss the readings and topics. Class participation consists of active contributions to interactive experiences, group work, and thoughtful speaking and listening. If you tend to be uncomfortable speaking up in classes, please speak to me early in the semester to discuss ways to help you succeed. In addition to your performance in the classroom, frequent absences will have a negative impact on your class participation grade. There will also be several graded in-class assignments that will be handed in over the course of the semester. There are no make-ups for in class assignments.

Writing Assignment #1 (30 points)

Propose an experiment to investigate whether caffeine improves academic performance. Your description of the experiment should be sufficient for a reader to conduct the experiment by themselves. You should include the following terms (in a way that makes apparent you know what they mean): independent variable, dependent variable, random assignment, operationalization, and control group. Finally, you should include a brief description about the results you expect to find and how these findings can meaningfully contribute to our understanding of how the mind works. This assignment should be 2–3 pages double-spaced and should include a graph that presents your expected results.

WRITING ASSIGNMENT #2 (30 Points)

A critical skill for psychologists is the interpretation and evaluation of research. In this assignment, you will serve as a journal reviewer. Summarize and critique the Bernsterin et al article available on the course Moodle site. Your summary should include a description of the rationale and methods used in the article, the relevant results, and the author's interpretation of the results (~1–2 pages double spaced). In addition, you should come up with at least two critiques or concerns with the article and the ways in which the study could be improved (~1 page). Finally, do you agree with the reviewers' decision to publish the article? This assignment should be approximately 2–3 pages double-spaced.

GRADING BREAKDOWN

POINT ALLOCATION		GRADING SCALE
Exam 1	100	A = 100% – 93%
Exam 2	100	A- = 93% – 90%
Exam 3	100	B+ = 90% – 87%
ZAPS Labs	40	B = 87% – 83%
Group Presentation	20	B- = 83% – 80%
Writing Assignment #1	30	C+ = 80% – 77%
Writing Assignment #2	30	C = 77% – 73%
<u>Class Participation</u>	<u>40</u>	C- = 73% – 70%
Total Points	460	D = 70% – 60%
		F = less than 60%

FINAL GRADE = ((Total Points Earned + Extra Credit)/460) *100

STUDENTS WITH DISABILITIES

Students with a documented disability who need reasonable academic accommodations should contact me as soon as possible to discuss your needs. I can only accommodate your needs if you allow me sufficient time to prepare. Informing me of a need on the day of an exam or on the date an assignment is due is NOT sufficient. As stated in the college handbook, "Students who claim physical, learning, or psychological disabilities should register with the Disability Support Coordinator at the start of the semester or as soon as the diagnosis is made." Additional information can be found on the Bard College Learning Commons website (<http://inside.bard.edu/learningcommons/>).

ACADEMIC INTEGRITY

All students are assumed to have read the Bard College Handbook and are familiar with the school's policies regarding Plagiarism and Academic Dishonesty. Violations of these policies are taken extremely seriously and one violation will result in a failing grade for the course and a referral to the Dean of Students for further action. Specific violations include (but are not limited to):

- Use or provision of prohibited assistance during quizzes or exams
- Sharing of writing assignments
- Plagiarism (which includes **both** the use of **words** and **ideas** without attribution)

Cognitive Psychology Schedule – Spring 2019

All readings, assignments, and lecture topics dates are subject to change. Exam dates are final.

MONDAY, JANUARY 28th: Introduction to Cognitive Psychology

Wednesday, January 30th: NO CLASS

Monday, February 4th: Cognition in the Classroom

To read for class:

Putnam, A. L., Sungkhasettee, V. W., & Roediger III, H. L. (2016). Optimizing learning in college: Tips from cognitive psychology. *Perspectives on Psychological Science, 11*, 652-660.

Kornell, N., & Bjork, R. A. (2007). The promise and perils of self-regulated study. *Psychonomic Bulletin & Review, 14*, 219-224.

Due at start of class:

ZAPS Lab: Stroop Effect (1)

Wednesday, February 6th: Cognition and the Brain

To read for class:

Reisberg: Chapter 2

Seung, S. (2012). Genius and madness. In *Connectome: How the brain's wiring makes us who we are* (pp 3 – 21). Boston, MA: First Mariner Books.

Due at start of class:

Survey results

Writing Assignment #1

Monday, February 11th: Selective Attention

To read for class:

Reisberg: Chapter 5 (pp. 141-157).

Chabris, C., & Simons, D. (2009). "I think I would have seen that". In *The Invisible Gorilla: How our intuitions deceive us*. (pp 1 – 42).

Due at start of class:

ZAPS Lab: Attentional Blink (2)

Wednesday, February 13TH: NO CLASS**Monday, February 18TH: Spatial attention**

To read for class:

Reisberg: Chapter 5 (pp. 157 – 168).

Wood, N., & Cowan, N. (1995). The cocktail party phenomenon revisited: How frequent are attention shifts to one's name in an irrelevant auditory channel? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21, 255-260.

Due at start of class:

ZAPS Lab: Visual Search (3)

Wednesday, February 20th: Divided attention

To read for class:

Reisberg: Chapter 5 (pp. 169 – 179).

Stothart, C., Mitchum, A., & Yehnert, C. (2015). The attentional cost of receiving a cell phone notification. *Journal of Experimental Psychology: Human Perception and Performance*, 41, 893-897.

Monday, February 25th: Categories and concepts

To read for class:

Reisberg: Chapter 9 (pp. 305 - 339).

Wednesday, February 27th: Exam 1**Monday, March 4th: Recognition**

To read for class:

Reisberg: Chapter 4 (pp. 122 – 136)

Stephan, B. C. M., & Caine, D. (2009). Aberrant pattern of scanning in prosopagnosia reflects impaired face processing. *Brain and Cognition*, 69, 262-268.

Due at start of class:

ZAPS: Face Perception Lab (4)

Wednesday, March 6th: Working Memory

To read for class:

Reisberg: Chapter 6 (pp 185 -202).

Conway, A. R. A., Cowan, N., Bunting, M. F. (2001). The cocktail party phenomenon revisited: The importance of working memory capacity. *Psychonomic Bulletin & Review*, 8, 331-335.

Due at start of class:

ZAPS: Sensory Memory Lab (5)

Monday, March 11th: Memory Acquisition

To read for class:

Reisberg: Chapter 6 (pp 203 -221).

Dittrich, L. (2017). Henry Gustave Molaison (1926 – 1953). In *Patient H.M.: A story of memory, madness, and family secrets*. (pp. 201-216). New York: Random House.

Wednesday, March 13th: Memory Retrieval

To read for class:

Reisberg: Chapter 7

Monday, March 18th and Wednesday, March 20th: NO CLASS, SPRING BREAK**Monday, March 25th: Memory Errors**

To read for class:

Schacter, D. (2001). The sin of misattribution. In *The Seven Sins of Memory: How the mind forgets and remembers*. (pp. 88 – 111). New York: Houghton Mifflin Harcourt.

Due at start of class:

ZAPS: False Memory Lab (6)

Wednesday, March 27th: Cognitive Training

To read for class:

Wixted, J. T., Mickes, L., & Fisher, R. P. (2018). Rethinking the reliability of eyewitness memory. *Perspectives on Psychological Science*, 13, 324 – 325.

Ericsson, K. A., Chase, W. G., & Faloon, S. (1980). Acquisition of a memory skill. *Science*, 208, 1181-1182.

Monday, April 1st: Language

Reisberg: Chapter 10 (pp. 345-371),

McCabe, J. A., Redick, T. S., & Engle, R. W. (2016). Brain-training pessimism, but applied memory optimism. *Psychological Science in the Public Interest*, 17, 187-191.

Due at start of class:

ZAPS: Lexical Decision (7)

Wednesday, April 3rd: Language

To read for class:

Reisberg: Chapter 10 (pp 371 - 382)

Due at start of class:

Writing Assignment #2

Monday, April 8th: Exam 2

Wednesday, April 10th: Decision-making

To read for class:

Reisberg: Chapter 12 (pp. 427-447)

Monday, April 15th: Decision-making

To read for class:

Kahneman, D. (2011). Prospect Theory. In *Thinking fast and Slow*. (pp. 278 – 288). New York: Farrar, Strauss, and Giroux.

Due at start of class:

ZAPS: Decision-making (8)

Wednesday, April 17th: Problem solving

To read for class:

Reisberg: Chapter 13 (pp. 475 – 503).

Isen, A. M., Daubman, K. A., & Nowicki, G. P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 52, 1122-1131.

Due at Start of Class:

ZAPS: Sudden insight (9)

Monday, April 22nd: Intelligence

To read for class:

Reisberg: Chapter 13 (pp. 503-510, 516-524).

Zimmer, C. (2018). This race should end with them. In *She Has Her Mother's Laugh: The powers, perversions, and potential of heredity*. New York: Random House.

Wednesday, April 24th: Metacognition

To read for class:

Hartwig, M. K., & Dunlosky, J. (2012). Study strategies of college students: Are self-testing and scheduling related to achievement? *Psychonomic Bulletin & Review*, 19, 126-134.

Monday, April 29th: NO CLASS, ADVISING DAYS**Wednesday, May 1st: Human Factors**

To read for class:

TBD

Monday, May 6th: Recap**Wednesday, May 8th and Monday, May 13th: NO CLASS, BOARD WEEK****Wednesday, May 15th: Final Exam**