

Cognition (PSYC 130-01)

Spring 2014

General Information

Instructor

Kendra Seaman

Contact Info: kls97@georgetown.edu | 306H White-Gravenor

Office Hours: Tuesday, Thursday 11:00 AM – 12:00PM (and by appointment)

Undergraduate Teaching Assistant

Joshua Loewenstern | Contact Info: jnl25@georgetown.edu

Meeting Time: Tuesday/Thursday 9:30 -10:45 AM, White Gravenor 311

Required Text:

Goldstein, B. (2011). *Cognitive Psychology: Connecting Mind, Research and Everyday Experience*, 3rd Edition with *CogLab 2.0*. Wadsworth Cengage Learning.

Required Journal Articles:

Ackerman, J. M., Nocera, C. C., & Bargh, J. A. (2010). Incidental haptic sensations influence social judgments and decisions. *Science*, 328, 1712–5. doi:10.1126/science.1189993

Dijksterhuis, A., Bos, M. W., Nordgren, L. F., & van Baaren, R. B. (2006). On making the right choice: The deliberation-without-attention effect. *Science*, 311, 1005–7. doi:10.1126/science.1121629

Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *The American Psychologist*, 64, 515–26. doi:10.1037/a0016755

Lenneberg, E. H. (1969). On explaining language. *Science*, 164, 635–643. doi:http://dx.doi.org/10.1126/science.164.3880.635

Sparrow, B., Liu, J., & Wegner, D. M. (2011). Google effects on memory: Cognitive consequences of having information at our fingertips. *Science*, 333, 776–8. doi:10.1126/science.1207745

Trade Paperbacks:

(Only 3 of these texts will be required per student; Specific assignments will be during Week 2)

Baumeister, R. F., & Tierney, J. (2011). *Willpower: Rediscovering the greatest human strength*. New York: Penguin Books.

Chabris, C., & Simons, D. (2009). *The invisible gorilla: How our intuitions deceive us*. New York: Crown.

Duhigg, C. (2012). *The power of habit: Why we do what we do in life and business*. New York: Random House.

Foer, J. (2011). *Moonwalking with Einstein: The art and science of remembering everything*. New York: Penguin.

Klein, G. (2009). *Streetlights and Shadows: Searching for the Keys to Adaptive Decision Making*. Boston: MIT Press.

Mullainathan, S., & Shafir, E. (2013). *Scarcity: Why having too little means so much*. New York: Times Books.

Pennebaker, J. W. (2011). *The secret life of pronouns: What our words say about us*. New York: Bloomsbury Press.

Tough, P. (2012). *How children succeed: Grit, curiosity and the hidden power of character*. New York: Houghton Mifflin Harcourt Press.

Weiner, J. (1999). *Time, love, memory: A great biologist and his quest for the origins of behavior*. New York: Knopf.

Other Required Material:

CogLab: This online library of demonstration experiments will be used to illustrate the methods of cognitive psychology. It comes bundled with the textbook or can be purchased separately at <https://coglab.cengage.com/info/purchase.shtml>.

nClass: This smartphone/tablet application will be used to take attendance and for class participation. Free applications are available for download at <http://www.getnclass.com/>. Please see instructor if you do not have access to an appropriate device in order to make alternative arrangements.

Course Overview

Course Overview. Cognitive psychology is the study of how we sense and interpret information from the world around us, incorporate this new information with our prior experiences, and determine how to respond to an ever-changing environment. While the main purpose of this course is to introduce you to the scientific study of the mind, I hope you will also begin to understand the central role cognition plays in our everyday lives.

The course will proceed in three distinct modules: Attention and Perception, Learning and Memory, and Higher Cognitive Function. Each module will end with a module exam and there will be a cumulative final exam. Written work will include both formal and informal writing assignments. You will also be expected to carry out several demonstration experiments from the on-line *CogLab* library and participate in class polls and discussions.

Course Learning Objectives. Upon completing this course, students should be able to:

- Analyze, evaluate, and compare major theories in cognitive psychology and relate new experimental results to these theories.
- Critically evaluate the quality of cognitive research and formulate logical arguments on the basis of theoretical or empirical analyses.
- Understand research methods in cognitive psychology, the strengths and weaknesses of these methods, and how these methods are being integrated with neuroscience to further our understanding of how the mind and brain function.
- Explain some of the broader implications of cognitive research for society.

Department Learning Goals. The department has developed a set of learning goals for the undergraduate program, which can be found at http://psychology.georgetown.edu/undergraduate/handbook#Learning_Goals. This course is designed to meet the following goals: 1.1.a-c; 1.2.d; 1.4.a-c; 2.1.b; 2.3.a-b; 2.4.a-b; 3.a, b, d, e, f; 4.a-d

Course Requirements

Exams (45% of grade). Three exams will be given in class as indicated on the “Course Schedule” below and each exam will be worth 15% of the final grade. Module exams will cover the readings, lectures, and discussions relevant to that module of the course. They will contain a combination of multiple-choice, true-false, identification and short response questions. Taking these exams is not optional; the only exception is an emergency for which you have an acceptable excuse. There will also be a comprehensive final exam administered during the final exam period. The final will be optional for students who have not missed any of the module exams. Students who miss a regular term exam FOR ANY REASON must take the final. The grade on the final will substitute for the missing exam. Students who have taken all three exams may elect to take the final, and the lowest exam score will be dropped.

Writing Assignments (40% of grade). There will be several formal and informal writing assignments throughout the course, described in detail below. All writing assignments, formal and informal, should be carefully prepared and proofread. They are due at the beginning of class on the dates indicated below on the “Course Schedule.” It is essential that all writing assignments reflect your own original work (see note on academic integrity below) and should contain little or no quotations from other sources. Specific guidelines for each type of writing assignment, including the rubrics that will be used for evaluation, are posted on Blackboard.

All writing assignments should be saved as Microsoft Word documents (.docx) and be named with the student’s last name and assignment, i.e. “Loewenstern_M1_Article_Reflection.docx.” All writing assignments will be submitted via Blackboard as detailed below; no writing assignments will be accepted via email. Word limits have been indicated for all formal writing assignments. These are firm limits. Please do a word count. If your answer seems to exceed the limit, I will do a word count myself. If it exceeds the limit by more than a few words, I will not read the assignment and you will receive no credit. So please be precise and concise in your writing.

Book Evaluations (18% of grade). Each module you will be assigned a trade paperback book to read and critically evaluate in 500 words or less. For each evaluation (6% of your grade), you will be responsible for *briefly* summarizing the main psychological ideas of the book and describing whether or not the authors' presentations are consistent with scientific literature. Each evaluation *must* be submitted via SafeAssign and will be graded using a 6-point scale taking into account both the clarity and content of your writing.

Article Responses (12% of grade). Each module you will also read and respond to an original research article in 250 words or less. For each paper (4% of final grade), you will be required to *briefly* summarize the research reported in the article and provide a personal response to the article. Each response *must* be submitted via SafeAssign and will be graded on a 4-point scale taking into account both the clarity and content of your writing.

Blog Assignments and Commentary (9% of grade). During each module of the course, you will be expected to create at least one blog post related to the theme of that module. Each blog post must include either an attachment or a link containing a pertinent article, website, or audio or video resource along with an original written description. You may not use any resource referenced in the textbook, in lecture, in the class blog, or by another student in your discussion group. Each post will be graded on a 2-point scale taking into account both your writing as well as the relevance of the resource to the module topic. In addition to the resource, each blog post should include:

- A brief description of the resource provided by the post.
- A short definition of the related cognitive construct.
- A brief discussion of how the resource is related to this construct.

In addition, you will be required to read and provide substitutive comments on the other posts made by those in your discussion group. You should read and comment on *at least* two other blog posts in each module of the class. These comments will be worth 1 point for each module. Thus, for each module blog you will need to make a minimum of one post and two comments and your contribution to each module's blog will be worth 3% of your final grade.

Personal Introduction (1% of grade). At the beginning of the course, you will write a *brief* personal introduction that should be no longer than 100 words. This assignment will allow you to introduce yourself to the instructor and ensure that you can correctly use SafeAssign.

Class Participation (10% of grade). My intent is for this course to be an engaging experience for you. To facilitate this interaction, we will be using the nClass mobile application. At the beginning of class you will be asked to enter an Event Code to log your attendance. Additionally, lectures will contain questions and statements that you will need to respond to with your device. Your interaction may allow you to earn points for correct responses or for general participation. Thus, you will need to download the appropriate application for your smartphone or tablet, and bring the device with you to each class each day.

CogLab Experiments (5% of grade). You are required to complete 10 on-line demonstration experiments from the *CogLab* library. Please complete the assignment prior to the class on which it is assigned. Students will receive 1 point for each experiment completed on time and group results from these experiments will be discussed in class. Instructions for how to get started with *CogLab* are posted on Blackboard; please complete all steps as soon as possible so that I can be sure you registered for our class.

Please do not read the explanation of the predicted results in the *CogLab* Manual or online until *after* you have completed the activity. Instead, follow the directions given on screen as if you were a participant in a research study. This will allow you to approach the experiment as a naïve participant, increasing the chances that the task will more accurately measure your cognitive performance. After completing the experiment, read the introductory materials you skipped, examine your own data in light of the explanation, and come to class ready to discuss. Once you have completed an experiment, *CogLab* will automatically record it, so you don't need to notify me separately. If you want to verify that your work has been recorded, you can go to "account access" and a list of all

completed experiments will be shown there. If you complete an experiment after the deadline, it will still appear on this list, but as described below, you will not receive credit for it.

Course Policies

Grading. As alluded to above, your final grade will be based on exams (45% of final grade), written assignments (40% of final grade), Class Participation (10% of grade), and *CogLab* Experiments (5% of final grade). Grades of individual assignments will be based on absolute performance, not on the relative performance of others in the class (i.e. there will not be a curve). At the end of the semester, final grades will be computed by taking the proportion of the points earned for the course requirements. If your final score has a fractional part that is exactly .5 or greater, I will round up to the nearest whole number. If your score has a fractional part lower than .5, I will round down. Your final letter grade will be based on the following grading scale: A 93-100%; A- 90-92; B+ 87-89; B 83-86; B- 80-82; C+ 77-79; C 73-76; C- 70-72; D+ 67-69; D 63-66; D- 60-62; F <60.

Feedback. All grades will be posted on the course website as soon as they are available. We will make every effort to keep an up-to-date and accurate reflection of your course grade on Blackboard. Occasional grading errors may occur, so please bring any concerns about your grade to our attention (privately) as soon as possible.

Late assignments. All assignments are due at the beginning of class (9:30 AM) on the day given in the “Course Schedule” below. Formal writing assignments turned in on the due date, but after the beginning of class, will have 1 point deducted. Each additional day the paper is late, 1 more point will be deducted. Informal blog posts must be turned in on the day they are due to receive any credit; posts made after the beginning of class will have 1 point deducted from the final score. If you complete a *CogLab* demonstration experiment after the deadline, then you will not receive credit for that experiment.

Missing Exams. Everyone is expected to take the exams as scheduled and individual makeup exams will not be given; no exams, module or final, will be given on a different date. Occasionally, there are unforeseeable emergencies that prohibit students from taking an exam. Examples of acceptable excuses are personal illness or family emergencies, although other excuses may be acceptable. Regardless of the excuse, you must provide documentation of the reason you missed the exam and you will not be allowed to miss or make up another exam.

Class Attendance. Students are expected to attend class and are responsible for all material covered in class. Please be courteous to your instructor and classmates by arriving promptly for class and quietly excusing yourself if necessary. My intent is to create a classroom environment that is conducive to learning and I expect your cooperation in this endeavor. If for any reasons you must miss a class, you are responsible for the material presented and discussed that day. Copies of lecture slides will be provided on Blackboard to facilitate thought and discussion during class. However, the slides only provide an outline of the material presented in lecture and should not be considered an adequate substitute for attending class.

Reading assignments. Reading assignments are listed on the “Course Schedule” below and come from the required textbook for the course, scientific journal articles that will be available on Blackboard, or trade paperback books. These assignments should be read prior to class and you should be prepared to discuss this material in each class period. Both readings and lectures will cover important concepts in cognitive psychology; there may be overlap between the readings and the lectures, but there will deviation between the two.

Blackboard. This course will be organized using Blackboard. On the course website you will find course announcements, lecture slides, and a copy of this syllabus. You will also turn in your written assignments and create your blog posts on Blackboard. Blackboard can be accessed at <https://campus.georgetown.edu> using your GU NetID and password on the Blackboard site.

Discussion Groups. All students will randomly be placed into discussion groups for the course. These groups will be used for both in-class and online discussions via Blackboard and will change for each module and activity. Dates

for in-class discussions are listed on the “Course Schedule” below and participation in these in-class discussions will contribute to the overall participation grade.

Communication. This syllabus and the course website on Blackboard will be the primary source of information for the course. Course announcements will also be made via email and posted on Blackboard. For specific questions that are not answered on Blackboard, you are encouraged to email either the course Instructor or TA. This is the best way to contact us. Please be sure to include your *name* in all email correspondence. If you would prefer to talk to one of us directly, please utilize the office hours listed on the first page or email either of us directly to schedule a separate appointment.

Help! If you are struggling with the course material, it is imperative that you contact either the course Instructor or TA as soon as possible. We are happy to help you develop study skills and identify additional resources if you contact us in a timely matter; however, there is little we can do to help you right before an exam and even less we can do if you wait until the end of the course. Students who find themselves struggling with the writing assignments are encouraged to check out the resources at the Writing Center, <http://www.library.georgetown.edu/writing-center>.

Academic Integrity. Students must read, understand and follow Georgetown’s honor system, which can be found at <http://gervaseprograms.georgetown.edu/honor/system/53516.html>. Each student in the class should have completed the Scholarly Research and Academic Integrity Tutorial required of all entering students. The tutorial, and a helpful tip sheet, can be found at <http://www.library.georgetown.edu/tutorials/academic-integrity>. Cheating, plagiarism, or any other form of academic dishonesty will not be tolerated and the appropriate sanctions will be applied.

Disability Support. Any student who may need an accommodation based on the potential impact of a disability should contact the Academic Support at 202-687-8354 in Leavey Center, Suite 335 to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: <http://academicsupport.georgetown.edu/disability/>.

Extra Credit. Participating in, or reading about, “real” psychological experiments will aid your understanding of cognition. Thus, you may earn up to 1 percentage point of extra credit by either participating in an experiment here at Georgetown (via the Georgetown Research Volunteers Program, GRVP) or writing a brief (maximum 500 words) critical review of a recent article on some topic in cognition that was reported in a professional journal. More detailed information on how to sign up for the GRVP is posted on Blackboard. If you choose to do the article critique, you should select the article yourself, and then get the instructor’s permission prior to writing your review. Excellent brief articles may be found in *Psychological Science* and *Current Directions in Psychological Science*.

Deadlines: As with all other class assignments, extra credit is due at the beginning of class on the due date. No extensions will be granted. If you plan to write a critical review, you must obtain the instructor’s permission for the article you will review by Thursday, April 3 and submit your critical review via SafeAssign on Blackboard by Tuesday, April 15. If you chose to participate in a research study, you must complete your participation by Tuesday, April 15.

Please do not ask for any other extra credit opportunities.

Course Schedule*

Week	Class	Topic	Reading	CogLab Deadlines	Writing Deadlines
1	1/9	Introduction to Cognition			
2	1/14	History & Methods 1	Chapter 1		Personal Introduction
	1/16	Cognitive Neuroscience & Methods 2	Chapter 2	Stroop Effect	
3	1/21	Class Cancelled - Weather		Simon Effect	
	1/23	Vision	Chapter 3		
4	1/28	M1 Article Discussion Mechanical & Chemical Senses	Ackerman et al., 2010		M1 Article Response
	1/30	Attention & Cognitive Control	Chapter 4	Partial Report	
5	2/4	Sensory Memory & STM	Chapter 5	Operation Span	M1 Blog Post
	2/6	Working Memory	Chapter 6	Levels of Processing	
6	2/11	M1 Exam: Perception and Attention			M1 Blog Commentary
	2/13	Module 1 Book Discussion			M1 Book Evaluation
7	2/18	LTM: Encoding and Retrieval	Chapter 7	Serial Position	
	2/20	LTM: Declarative Memory	Chapter 6	Implicit Learning	
8	2/25	M2 Article Discussion LTM: Non-declarative Memory	Sparrow et al., 2011		M2 Article Response
	2/26	Knowledge	Chapter 9		M2 Blog Post
9	3/4	Everyday Memory and Errors	Chapter 8	Risky Decisions	
	3/6	M2 Exam: Learning and Memory			M2 Blog Commentary
10	3/11	NO CLASS (Spring Break)			
	3/13	NO CLASS (Spring Break)			
11	3/18	Module 2 Book Discussion			M2 Book Evaluation
	3/20	Decision Making 1	Chapter 13	Typical Reasoning	
12	3/25	Decision Making 2 <i>Guest Lecturer Maj. Jason Spitaletta</i>	Kahneman & Klein, 2009	Lexical Decision	
	3/27	M3 Article Discussion Reasoning	Dijksterhuis et al., 2006		M3 Article Response
13	4/1	Language 1	Chapter 11		
	4/3	Language 2 <i>Guest Lecturer Kathryn Schuler</i>	Lenneberg, 1969		
14	4/8	Visual Imagery	Chapter 10		
	4/10	Problem Solving & Creativity	Chapter 12		M3 Blog Post
15	4/15	Other Influences on Cognition			
	4/17	NO CLASS (Easter Break)			
16	4/22	M3 Exam: Higher Cognitive Function			M3 Blog Commentary
	4/24	M3 Book Discussion			M3 Book Evaluation
17	5/8	Final Exam (9:00AM-11:00AM)			

*Course Schedule may be modified as needed throughout the semester. All changes will be announced and updated versions of syllabus will be posted on Blackboard.