

Cognitive Psychology (PSY 2014-10)

Spring 2013

General Information

Instructor

Kendra Seaman

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Office Hours: Tuesday, Thursday 9:30-10:30AM (and by appointment)

Graduate Teaching Assistant

Steve Kenney

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Office Hours: Tuesdays 1:00-2:00PM (and by appointment)

Meeting Time: Tuesday/Thursday 11:10 AM -12:25 PM, Fungler 207

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

Additional Readings

Forster, S., & Lavie, N. (2007). High perceptual load makes everybody equal: Eliminating individual differences in distractibility with load. *Psychological Science*, 18, 377–381. doi:10.1111/j.1467-9280.2007.01908.x

Scullin, M. K., & McDaniel, M. A. (2010). Remembering to execute a goal: sleep on it! *Psychological Science*, 21, 1028–35. doi:10.1177/0956797610373373

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, 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.

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.

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 (37% 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. Assignments should be uploaded to Blackboard by the beginning of class on the due date.

In-Class Exercises and Article Evaluations (18% of grade). There will be two in-class exercises (2/14 and 4/4), each worth 4% of your overall grade. To prepare for these exercises, you will be asked to read two specific research articles, which will be posted on Blackboard. On the day of the exercise, you will be asked to take a short quiz (worth 2% of your final grade) covering the assigned article. Then, the class will break into discussion groups to converse about the paper and fill out a worksheet (worth 2% of your final grade). Students who are absent from class will not receive any credit for the missed exercise.

After your group discussion, you will *independently* write a three-page double-spaced evaluation of the article. Thus, your paper should be your own original work. For each paper (5% of final grade), you will be required to summarize the research reported in the paper and provide a critical evaluation of the research. Each evaluation will be graded on a 5-point scale taking into account both the clarity and content of your writing. Specific guidelines for this assignment are posted on Blackboard.

CogLab Reflections (10% of grade). In addition to completing 15 on-line demonstration experiments from the *CogLab* library (further described below), you will be required to write two, two-page double-spaced formal written reflections about your experience. Each reflection will be graded on a 5-point scale taking into account both the clarity and content of your writing. Specific guidelines for this assignment are posted on Blackboard.

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. 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.

CogLab Experiments (10% of grade). You are required to complete 15 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. Also, as described above, two of the writing assignments are formal written reflections on your experience with *CogLab*. Further instructions for how to get started with *CogLab* are posted on Blackboard.

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.

Class Participation (5% of grade). My intent is for this course to be an engaging experience for you. To facilitate this interaction, we will be using Turning Point clickers. 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 purchase Turning Technologies ResponseCard, which can be purchased at the campus bookstore, or download the appropriate application and license for an iPod/iPad/iPhone. You will need to register this device on Blackboard (Tools → Turning Technologies Registration Tool) and bring it with you to each class each day.

Research Credit (3% of grade). According to psychology department policy, students in Psychology 2014 are required to earn 3 points of research credit. You can earn research credit either by participating in research studies or by writing reports about articles that describe psychological research. Whichever option you choose, the requirement is designed to give you some hands-on experience with psychological research. The research requirement is administered with the web-based Experiment Management System (EMS). (URL:<http://research.psychology.gwu.edu>). Further information regarding the research requirement is posted at the site for this system. Please read over this information carefully. Please note, however, that the EMS will not be fully functional till the second week of classes. At that point, entries will have been created for all participating classes and EMS accounts will have been created for all students listed on the rosters of those classes. If an account has not been created for you by that time, you will need to create an account yourself, following the instructions at the EMS site. In creating an account for yourself, do not be concerned that the system appears to think that your email account ends in '.[gwu.edu](http://www.gwu.edu)'. The system is set up to forward your mail to your 'gwmmail.gwu.edu' account. Finally, please make sure to fulfill the research requirement. If you fail to do so, your grade in this course will suffer; for every point of research credit that you fail to earn, one percent of the maximum number of possible points will be subtracted from your final average for the course. Please note that you must fulfill the research requirement by April 26. If you have any questions regarding the research requirement, please contact psychres@gwu.edu.

Course Policies

Grading. As alluded to above, your final grade will be based on exams (45% of final grade), written assignments (37% of final grade), *CogLab* Experiments (10% of final grade), Class Participation (5% of grade) and Research Credit (3% 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 the 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 (11:10 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 or scientific journal articles that will be available on Blackboard. These reading 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 through the myGW website, www.my.gwu.edu, using your GW 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.

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 GTA. 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 GTA 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.gwu.edu/~gwriter/>.

Academic Integrity. Students must read, understand and follow George Washington University's Code of Academic Integrity and all formal assignments and exams will include an affirmation of academic integrity. Academic dishonesty, which is defined in The Code as, "cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information," will not be tolerated and the appropriate sanctions will be applied. A copy of the full code can be found at: <http://www.gwu.edu/~ntegrity/code.html>.

Disability Support Services (DSS). Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: <http://gwired.gwu.edu/dss/>.

University Counseling Center (UCC) 202-994-5300. The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:

- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals
- <http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices>

Security. In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.

Course Schedule*

Week	Class	Topic	Reading	CogLab Deadlines	Writing Deadlines
1	1/15	Introduction to Cognition			
	1/17	History & Methods I	Chapter 1		
2	1/22	Cognitive Neuroscience & Methods II	Chapter 2		
	1/24	S&P: Vision I	Chapter 3		
3	1/29	S&P: Vision II		Receptive Fields Signal Detection Stroop Effect Simon Effect	
	1/31	S&P: Other Senses		Partial Report	Module 1 Blog Post
4	2/5	Attention	Chapter 4		Module 1 Blog Commentary CogLab Reflection #1
	2/7	Executive Function			
5	2/12	Module #1 Exam: Attention and Perception			
	2/14	In-Class Exercise #1	Forster & Lavie (2007)		
6	2/19	Sensory Memory	Chapter 5	Operation Span	
	2/21	Short-Term and Working Memory	Chapter 5	Serial Position	Article Evaluation #1
7	2/26	LTM: Declarative	Chapter 6	Implicit Learning	
	2/28	LTM: Nondeclarative	Chapter 6	Levels of Processing	
8	3/5	Class Cancelled		False Memory	
	3/7	LTM: Encoding & Retrieval	Chapter 7	Prototypes	Module 2 Blog Post
9	3/12	NO CLASS (Spring Break)			
	3/14	NO CLASS (Spring Break)			
10	3/19	LTM: Everyday memory and memory errors	Chapter 8	Mental Rotation	Module 2 Blog Commentary
	3/21	Module #2 Exam: Memory			
11	3/26	Knowledge	Chapter 9	Lexical Decision	
	3/28	Visual Imagery	Chapter 10		
12	4/2	Language	Chapter 11	Typical Reasoning	
	4/4	In-Class Exercise #2	Scullin & McDaniel (2010)	Risky Decisions	CogLab Reflection #2
13	4/9	Problem Solving and Creativity	Chapter 12		
	4/11	Decision Making I	Chapter 13		Article Evaluation #2
14	4/16	Decision Making II			
	4/18	Reasoning			Module 3 Blog Post
15	4/23	Module #3 Exam: Higher Cognitive Function			
	4/25	Emotional, Social & Lifespan Cognition			Module 3 Blog Commentary
16	5/7	Final Exam (10:20AM-12:20PM)			

*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.