

**PSYC 317-003  
COGNITIVE PSYCHOLOGY  
Spring 2017**

**Time:** 9:00am-10:15am Tues Thurs  
**Classroom:** Planetary Hall 206  
**Instructor:** James Thompson  
**Office:** 2056 David King Hall  
**Email:** [jthompsz@gmu.edu](mailto:jthompsz@gmu.edu)  
**Office Hours:** 11:30am-12:30pm Weds or by appointment

**Course Objectives**

Cognitive psychology is the scientific study of how we perceive, attend, remember, imagine, speak, reason and problem solve about the world around us. This course will introduce some of the major issues, theories, and experimental findings in cognitive psychology. By the end of this course you should be able to:

- Understand well established theories cognitive domains such as perception, attention, memory, language, problem-solving, reasoning and decision-making.
- Discuss current empirical research relevant to theories of cognition.
- Appreciate the logic of research design and the interpretation of findings as they relate to relevant theories of cognition.
- Understand how the traditional methods of cognitive psychology (e.g., reaction time, error analysis) can be used as tools to understand mental events.
- Understand how the established theories of cognitive psychology relate to the brain
- Discuss how research and theory in cognitive psychology have been applied to "real world" problems.

**Textbook (required)**

Goldstein, E. B. (2015). Cognitive Psychology: Connecting Mind, Research, and Everyday Experience. 4th Edition. Stamford CT: Cengage.

**Online Resources**

<http://gocognitive.net/>

You don't need to sign up to this site to view the demos or interviews, but there is more stuff there if you do (and it is free). It is a not-for-profit site, funded in part by the Association for Psychological Science.

**Examinations and Grading**

Exams: A number of studies have shown that regular testing helps you learn and remember material better. This course will include **three** non-cumulative exams based on readings and lectures. Your exam scores will count towards **60% of your grade**. The exams will consist of multiple-choice and short answer questions. The exams will test your knowledge and understanding of the material covered in both the lectures and the

text. To receive a high grade in this course you will need to demonstrate understanding of the key concepts from both the lectures and the text. Mere memorization of the facts presented in the course will not be sufficient to receive a high grade in the course. There will be material presented during the classes that will not be found in the powerpoint presentations, so it is important to make sure you attend class. If you are having any difficulties with the material, be sure to get in touch with me.

Make-up exams will not be given unless there is a documented emergency and will consist of exam questions.

Article Review and Literature Search: The goal of this exercise is to get you to a) find out how to search for psychology articles using PubMed or PsychINFO; b) read and understand research articles; and c) relate them to things that happen in the real world. This paper will contribute **25% to your final grade**.

1. You will choose **one primary research** article from the five articles posted on Blackboard.
2. Write a three page (double spaced, 12 font) summary of the article in which you a) identify the research question, (b) identify the independent and dependent variables, (c) summarize the results, and (d) summarize the researcher(s)' conclusions.
3. Then write two pages (double spaced, 12 font) relating the research question and findings from this article to a "real world" example from an event that happened to you, someone you know, or someone from a book or TV show.
4. Lastly, take the keywords from the article and perform a search for similar articles using either PubMed ([www.pubmed.com](http://www.pubmed.com)) or PsychINFO (<http://furbo.gmu.edu/dbwiz/psy>). Generate a list of **five relevant** articles, print this out including your search terms, and include this with your article review. If you have any difficulties using PubMed or PsychINFO, finding the keywords (quick tip – they are usually on the first page so look there first) or determining what other articles are relevant in your search (yes, this will be part of your grade) come and see me *before* the paper is due. Five percent (5%) will be docked for each day late.

Online Demos and Write Up: This assessment is worth **10% of your final grade**. Cognitive Psychology involves experiments, and understanding these experiments is important to understanding the broader general principles. A series of demos of classic Cognitive Psychology experiments is freely available at <http://gocognitive.net/demos>

For this assessment, you will need to complete any four of the demos (you choose the four). Then, for each demo you complete you will need to write a one page summary of the demo, including information about a) the psychological construct it examines (e.g., Attention? Working memory?); b) the general principle it demonstrates; c) what that tells us about cognition more broadly. Use your textbook and lecture notes as reference. More information will be posted on Blackboard.

Class Participation: The final 5% of your grade will come from participation in class discussions. Note - **this does not mean attendance** – you actually need to make a constructive contribution to class discussion.

**Cell phones may not be used during class.**

**Important Dates:** Last day to add: Jan 30th. Last day to drop Feb 24th. Spring Break Mar 13th – Mar 19th.

### **Grades**

A (100-90); B (89-80); C (79-70); D (69-60); F (below 59). Please note that the actual grading standard will be based on class performance on each exam and the article critique.

### **Extra Credit**

Extra credit may be obtained by participating in experiments sponsored by the Psychology Department. Each hour of extra credit will raise your final grade by 0.5%. Students may receive up to 3 additional percent (3%) in their final grade (6 hours max). However, participation in experiments is not a course requirement, and non-participation will not reduce the final grade. **THERE IS NO EXTRA CREDIT FOR ONLINE SURVEYS.**

### **Honor Code**

George Mason University has a code of Honor that each of you accepts by enrolling as a student. You should read and become familiar with this code at <http://mason.gmu.edu/~montecin/plagiarism.htm>. The expectation is that all of the work you do for this class will be the work of one individual. The instructor of this course reserves the right to enter a failing grade to any student found guilty of an honor code violation. However, you are fully encouraged to discuss the readings and topics raised in this class with your fellow students.

### **Attendance**

Class attendance is essential, as the lectures will frequently present information not found in the textbooks, and the material for the exams will be drawn from both lectures and readings. The lecture slides will be made available after each lecture via the web. However, please note that having access to the lecture slides is NOT a substitute for attending class AND taking notes. Relying only on the lecture slides will not be sufficient for you to score well on the exams.

### **Technology**

Powerpoint will be used to present class materials. Blackboard will be used to communicate with the class and distribute assignments/additional reading.

### **Special Help**

If you are a student with a disability and you need academic accommodations, please see me during the first week of class and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

### **Access to Computers**

Students must have access to their GMU Email account. Students should feel free to communicate with me via email. Updates and notifications will be sent to the class email

list using your GMU email address. If you need to use university facilities, you can find out about location and hours of university facilities at <http://www.labs.gmu.edu/> or ask at the information desk at the Johnson Center. I will ONLY use your GMU Email address to contact you. Please use and check this address frequently. You may forward your GMU email to another address if you like, but please ensure that you are receiving the email to your GMU Email address.

**Cancellation Policy**

In case class needs to be canceled due to an unexpected event, students will be informed via email as soon as possible. Make-up sessions will be arranged for canceled classes.

**Course Outline**

Any schedule changes or changes in assignments will be announced in class in advance. After an absence, students are responsible for contacting the instructor to obtain accurate information.

DATE	READING	DESCRIPTION
24-Jan	Syllabus	Course Organization
26-Jan	Chapter 1	Introduction to Cognitive Psychology
31-Jan	Chapter 2	Cognitive Neuroscience
02-Feb	Chapter 3	Perception
07-Feb	Chapter 3	Perception
09-Feb	Chapter 4	Attention
14-Feb	Chapter 4	Attention
16-Feb	Chapter 5	Short Term, & Working Memory
21-Feb	Chapter 5	Short Term, & Working Memory
23-Feb		<b>Review</b>
28-Feb		<b>EXAM 1</b>
02-Mar	Chapter 6	Long Term Memory: Structure
07-Mar	Chapter 7	Long-Term-Memory: Encoding, Retrieval, Consolidation
09-Mar	Chapter 8	Everyday Memory & Memory Errors
14-Mar		<b>Spring Break</b>
16-Mar		<b>Spring Break</b>
21-Mar	Chapter 8	Everyday Memory & Memory Errors
23-Mar	Chapter 9	Knowledge
28-Mar	Chapter 9	Knowledge
30-Mar		<b>Review</b>
04-Apr		<b>EXAM 2</b>
06-Apr	Chapter 10	Visual Imagery
11-Apr	Chapter 11	Language
13-Apr	Chapter 11	Language
18-Apr	Chapter 12	Problem Solving
20-Apr	Chapter 12	Problem Solving
25-Apr	Chapter 13	Judgment, Decisions, & Reasoning
27-Apr	Chapter 13	Judgment, Decisions, & Reasoning <b>- FINAL PAPER DUE -</b>
02-May	Chapter 13	Review
04-May		<b>EXAM 3</b>

Dates & readings are subject to change – any changes will be communicated in class.