# PSYC 317 - 001
# COGNITIVE PSYCHOLOGY
# Spring 2018

**Time:** **1:30-2:45pm Mon & Weds**
**Classroom:** **Krug Hall 7**
**Instructor:** **James Thompson**
**Office:** 2056 David King Hall
**Email:** **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.

**READ THIS!**
**Required Textbook**
Goldstein, E. B. (2015). Cognitive Psychology: Connecting Mind, Research, and Everyday Experience. 4th Edition. Stamford CT: Cengage

**WATCH THIS!**
Kolber, J., Margol, B. (2011-). Brain Games [Television series]. Washington, DC: National Geographic Channel

*Selected episodes will be assigned for each week and linked through Blackboard. All episodes/seasons (except Season 4) are available through Mason Library in the* ***Films on Demand*** *database. Season 4 is also available on Netflix.*

**Class Format**
Cognitive Psychology is an empirical science, which means it involves both a strong theoretical basis and a grounding in experiments. To reflect this fact, each week we will cover both theories from Cognitive Psychology and the experimental paradigms that have been used to test those theories. The Monday class will consist of a lecture

covering the theoretical and experimental basis behind that week's topic. You will need to have read the relevant chapter ***prior*** to coming to the Monday class. The Wednesday class will consist of demonstrations and discussion of specific experiments, and group-based in-class exercises.

**Assessment, Examinations and Grading**

Exams: This course will include **two** exams (midterm and final) based on readings, lectures, and other class materials. Your exam scores will count towards **50% of your grade (midterm = 20%, final = 30%)**. The exams will consist of multiple choice and essay-based exam 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 early in the semester.

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

Brain Games & Quiz: Selected episodes of the National Geographic TV series Brain Games will be assigned for each week ahead of class. Each week, you will be required to watch the episode assigned for each week, complete a brief quiz on that episode, and post your answers on ***Blackboard by 5pm Tuesday of each week***. Satisfactory completion of all of these quizzes will contribute **10% to your final grade.**

Final Paper: For final paper, you will need to write a **2000 word** paper on one of the *Debates in Cognitive Psychology* topics posted on Blackboard. These topics address some fundamental arguments in Cognitive Psychology. You should address both sides of the debate, as well as provide some resolution to the debate. You will need to draw from the relevant cognitive psychology literature, and you must cite in the body of your paper all books and papers you use, using **APA format referencing**. You should also include a cover page and an **APA-stype reference list**. Papers must be 12 point font and double spaced.

Some tutorials for APA referencing can be found here:

https://www.youtube.com/watch?v=CL2RrT6jFpQ

https://www.youtube.com/watch?v=loSSmkF6dfM

The final paper will contribute **30% to your final grade.**

Participation in Class Exercises: The final **10% of your grade** will come from participation in class discussions and exercises. Note - **this does not mean attendance** – you actually need to make a constructive contribution to class discussion and participate in in-class exercises.

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

**Important Dates:** Last day to add: Jan 29th. Last day to drop Feb 23th. Spring Break Mar 12th – Mar 18th.

**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 will the class and distribute assignments/additional reading. **I strongly recommend that you do not use a laptop during class to take notes.** While I will not enforce a laptop ban, students should be aware that there is now convincing evidence that using a laptop during class is associated with poorer class performance.

**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 |
|---|---|---|
| 22-Jan | Syllabus, Chapter 1 | Course Org & Intro to Cognitive Psychology |
| 24-Jan | Chapter 1 | Introduction to Cognitive Psychology |
| 29-Jan | Chapter 2 | Cognitive Neuroscience |
| 31-Jan | Chapter 2 | Cognitive Neuroscience |
| 05-Feb | Chapter 3<br>BG S1.E1: Watch This! | Perception |
| 07-Feb | Chapter 3 | Perception |
| 12-Feb | Chapter 4<br>BG S1.E2: Pay Attention! | Attention |
| 14-Feb | Chapter 4 | Attention |
| 19-Feb | Chapter 5<br>BG S5.E6: Memory | Sensory, Short-Term, & Working Memory |
| 21-Feb | Chapter 5 | Sensory, Short-Term, & Working Memory |
| 26-Feb | Chapter 6 | Long Term Memory: Structure |
| 28-Feb | Chapter 6 | Long Term Memory: Structure |
| 05-Mar | | **Review** |
| 07-Mar | | **MIDTERM EXAM** |
| 12-Mar | | **Spring Break** |
| 14-Mar | | **Spring Break** |
| 19-Mar | Chapter 7<br>BG S1 E3: Remember This! | Long-Term-Memory: Encoding, Retrieval, Consolidation50 |
| 21-Mar | Chapter 7 | Long-Term-Memory: Encoding, Retrieval, Consolidation |
| 26-Mar | Chapter 8<br>BG S1 E3: Remember This! | Long-Term-Memory: Everyday Memory & Memory Errors |
| 28-Mar | Chapter 8 | Long-Term-Memory: Everyday Memory & Memory Errors |
| 02-Apr | Chapter 9<br>BG S2.E6: Dumb It Up | Knowledge |
| 04-Apr | Chapter 9 | Knowledge |
| 09-Apr | Chapter 10<br>BG S6.E6: Imagination | Visual Imagery |
| 11-Apr | Chapter 10 | Visual Imagery |
| 16-Apr | Chapter 11<br>BG S4.E8: Language | Language |
| 18-Apr | Chapter 11 | Language |
| 23-Apr | Chapter 12<br>BG S5.E6: Logic | Problem Solving |
| 25-Apr | Chapter 12 | Problem Solving |
| 30-Apr | Chapter 13<br>BG S4.E4: Risk | Judgment, Decisions, & Reasoning<br>**- FINAL PAPER DUE -** |
| 02-May | Chapter 13 | Judgment, Decisions, & Reasoning |
| 09-May | | **FINAL EXAM** |

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