PSYC 317-001 COGNITIVE PSYCHOLOGY GEORGE MASON UNIVERSITY SPRING 2008, TUES & THURS 9.00AM – 10:15 AM ROBINSON HALL B205

Instructor: Dr. James Thompson Office: David King 2056, 703-993-9356 Email: jthompsz@gmu.edu Office hours: Tuesdays, 10.30am-11.30am (right after class) 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. (2008). Cognitive Psychology: Connecting Mind, Research, and Everyday Experience. 2nd Edition. Belmont, CA: Thomson Wadsworth.

Examinations and Grading

<u>Exams</u>: A number of studies have shown that regular testing actually helps you learn and remember material better than no testing. This course will include four (4) noncumulative exams based on readings and lectures. Your three best exam scores out of the four exams will count towards 60% of your grade. The exams will consist of multiplechoice 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 lecture notes, 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.

<u>Article Review and Literature Search</u>: 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 30% to your final grade.

- 1. You will choose one research article from recent the cognitive psychology literature (I will provide a list of journals from which to choose).
- 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) 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.

<u>Class Participation</u>: The final 10% of your grade will come from participation in class discussions. Note - this does not just mean attendance – you actually need to contribute in a positive manner to the class to get good grades.

Important Dates

Last day to add: Feb 5th. Last day to drop Feb 22. Spring Break Mar 10-16. Final Exam May 13 7.30am-10.15am

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.

Honor Code

All exams must follow the guidelines of the GMU Honor Code. Students may consult with other students and use books, notes, and other sources in preparing for exams. However, when taking exams, **no books, notes, or student interaction will be allowed**. Cheating and plagiarism of any sort will not be tolerated.

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.

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.

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	Chapter 1	Introduction to Cognitive Psychology
24-Jan		Introduction to Cognitive Psychology
29-Jan	Chapter 2	Cognition & the Brain; Methods of Cog Psych
31-Jan		Cognition & the Brain; Methods of Cog Psych
5-Feb	Chapter 3	Perception
7-Feb		Perception
12-Feb	Chapter 4	Attention
14-Feb		Attention
19-Feb		EXAM 1
21-Feb	Chapter 5	Sensory, Short Term, & Working Memory
26-Feb		Sensory, Short Term, & Working Memory
28-Feb	Chapter 6	Long Term Memory
4-Mar		Long Term Memory
6-Mar	Chapter 7	Everyday Memory & Memory Errors
11-Mar	NO CLASS	SPRING BREAK
13-Mar	NO CLASS	SPRING BREAK
18-Mar		Everyday Memory & Memory Errors
20-Mar		EXAM 2
25-Mar	Chapter 8	Knowledge
27-Mar		Knowledge
1-Apr	Chapter 9	Visual Imagery
3-Apr		Visual Imagery PAPER DUE
8-Apr	Chapter 10	Language
10-Apr		Language
15-Apr		EXAM 3
17-Apr	Chapter 11	Problem Solving
22-Apr		Problem Solving
24-Apr	Chapter 12	Reasoning & Decision-Making
29-Apr		Reasoning & Decision-Making
1-May	TBA	Special Topic: Cognitive Neuroscience
13-May		EXAM 4

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