Psychology 380: Cognitive Psychology Spring 2008 San Diego State University

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Meeting time and place: Tue & Thu 7:00-8:15, COM-207

Required Text: Cognition: The Thinking Animal, Daniel Willingham (3rd Ed.)

Prerequisite for this course: Psychology 101: Introduction to Psychology

Goals for this course:

Cognitive psychology is concerned with mental processes such as vision, attention, memory, and problem solving—basically everything that one means by the word "cognition." One appeal of cognitive psychology is that one need not completely understand the underlying "hardware" (i.e. the brain) in order to characterize the phenomena under investigation. Of course, it helps to be able to know how the brain helps (or hurts) to accomplish the mental operations in which you are interested. In this course, we will take a decidedly "cognitive neuroscience" approach to the topic of cognitive psychology.

This course will provide a survey of topics in cognitive psychology. We will frequently discuss topics in the context of historically important experiments. We will also discuss topics in the context of the underlying neural (brain) processes.

Course Learning Outcomes:

In the course of the semester, you should be able to:

- Identify the historical antecedents to cognitive psychology and state why they are important to how we study the mind.
- State the basic ideas of the cognitive approach.
- Explain what abstract constructs (such as memory or attention) are and how we can scientifically observe them.
- Identify the major divisions of the brain and state why it is important to study the brain in order to understand the mind/mental processes.
- Predict the outcomes of scientific experiments in cognitive psychology based on major theories of perception, attention, memory, imagery, decision making, problem solving, and language. Note that this objective requires an adequate understanding of

these theories in order to synthesize and predict new data.

• Be able to identify applications of the principles of cognitive psychology in every-day life.

Honesty:

Don't cheat. I take academic honesty very seriously. I will handle instances of cheating or related behaviors in accordance with policies of the SDSU Office of Judicial Procedures.

Readings:

Most of the readings will be assigned from Willingham's *Cognition*. A few of the reading assignments will be pdf's posted to Blackboard. All assigned readings should be completed before the class for which they are assigned. I will prepare my lectures with the assumption that everyone has already read the relevant material. This will allow you to come prepared to ask questions and answer my questions in class.

Lecture Slides:

I'll make (most of) the slides available on BlackBoad prior to lecture. This means that I am agreeing to have the lectures ready to go in time for you to print them out/download to your laptop prior to class if you wish. I will thus expect that everyone will have at least read the slides before class, so I don't have to read them all in class. I would much rather have a discussion about the topics in class than read you the slides, but I'll be happy to read if I feel people are not using the slides.

Grading:

Grades will be based on the following:

Exam 1	30%
Exam 2	30%
Exam 3	30%
Course Participation	10%

Please bring a ScanTron form (the skinny red one) to each exam. ScanTron forms may be purchased from the bookstore. All exams will be multiple-choice. Course participation involves coming to class, participating in class, and otherwise showing me that you are engaged in the course.

Extra Credit:

Extra credit is available by participating in ongoing research in the Psychology Department via the online system. Go to http://sdsu.sona-systems.com/ to sign up. This link and an FAQ can be accessed from the Psychology Department Homepage

(http://www.psychology.sdsu.edu/new-web/) under the Experiments tab on the top (black) navigation bar. Four participation credits will boost your final grade by 1/3 a letter grade (e.g. from a B- to a B). This credit is all-or-none, however. Three experimental credits will not boost your grade 1/4 of a letter grade (what would that look like, anyhow?). This is the only extra credit opportunity available, so you must be sure to follow all the guidelines (e.g., if you sign up for an experiment, be sure to make your appointment).

Schedule (subject to change—updates will be posted to Blackboard):

Week	Date	Topic	Reading
1	1/22	Introduction	
	1/24	History	Ch 1
2	1/29	Cognitive Neuroscience	Ch2, Kellogg Ch 2
	1/31	Visual Perception	Ch 3
3	2/5	Visual Perception	Ch 3
	2/7	No class	
4	2/12	Attention	Ch 4
	2/14	Attention	Ch 4
5	2/19	Review	
	2/21	Exam1	
6	2/26	Sensory Memory & Primary Memory	Ch 5
	2/28	Memory Encoding	Ch 6
7	3/4	Memory Encoding	Ch 6
	3/6	Memory Retrieval	Ch 7
8	3/11	Memory Retrieval	Ch 7
	3/13	Memory Storage	Ch 8
9	3/18	Memory Storage	Ch 8
	3/20	Memory in the Movies	Posted to Blackboard
10	3/25	Review	
	3/27	Exam 2	
11	4/1	Spring Break	
	4/3		
12	4/8	Visual Imagery	Ch 9
	4/10	Visual Imagery	Ch 9
13	4/15	Motor Control	Ch 10
	4/17	Decision Making & Reasoning	Ch 11
14	4/22	Decision Making & Reasoning	Ch 11
	4/24	Problem Solving	Ch 12
15	4/29	Problem Solving	Ch 12
	5/1	Language I	Ch 13
16	5/6	Language II	Ch 14
	5/8	Review	
	5/15	Exam 3	