# Psychology 3500 Cognition Spring 2010

**Professor:** Dr. Aaron Ashley

Office: SS 360

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Please note: This email address is the best way to contact me. You should, however, only your Weber State email account to contact me, because the Weber State mail system is likely to quarantine your email, and I will probably not open email from or respond to non-Weber State email accounts.

I typically respond to email in the morning. This tactic keeps me from responding to email all day. I will certainly respond to your emails during office hours, but outside of those times it will most likely be the following morning.

**Phone:** (801) 626-8743

Texts: Kellogg, R. T. (2007). Fundamentals of Cognitive Psychology. Los Angeles, CA: Sage.

Course Description: Cognitive psychology is the study of mental activity. It is the investigation of the so-called "black-box" between external stimulation and observable responses. Some of the topics of inquiry in cognitive psychology include perception, attention, memory, language, learning, and problem-solving. Cognitive psychologists are not only interested in understanding how mental processes occur and interact, but also in how we can use this understanding to enhance our lives. This course provides an overview of the field of cognitive psychology.

**Course Objectives and Expected Outcomes:** There are several general principles or themes that emerge across areas of inquiry in Cognitive Psychology/Cognitive Science. Some of the most fundamental are:

- Understanding the mind, like any other area of scientific inquiry, requires formulating and systematically testing well-developed and falsifiable theories.
- The human mind has evolved to solve many difficult problems in the face of imperfect data. The way the mind solves the problems it solves can be understood as processes that operate on structures (or mental representations).
- Understanding how the mind works means understanding its constituent representations and processes.

The primary goal of this course is to give you the tools to identify, understand, and appreciate how these general themes are realized across areas of inquiry in Cognitive Psychology and Cognitive Science. More generally, you should be able to recognize how these principles broadly guide and facilitate understanding how the mind works.

At the conclusion of the course you should be able to articulately discuss to the following questions:

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- What is the nature of intelligence?
- How does the mind generally work such that it can solve the problems it solves?
- How is information represented in the mind?
- What processes operate on mental representations to produce intelligent behavior?
- How does the form of mental representations affect how the mind solves various problems?
- Why does the mind function so well across so many domains and situations?
- How and why is human cognition simultaneously structured and flexible?

Course Material: I will post PowerPoint slide shows for each chapter from the text book. I will also post additional required articles and chapters corresponding to the course material. These articles and chapters will be posted under the "Required Articles/Chapters" section on the course webspace. These additional readings were selected specifically to enhance and complement the materials covered in the text. The "Supplementary Articles/Chapters" are just that, supplementary. You are not required to read these articles, but they are posted to provide you with further materials to enhance your understanding of the class material. In addition to the articles/chapters, I will also post video clips, audio files, and web links to relevant materials.

**Grades:** Your final course grade will come from your performance on four exams (100 pts each), ten weekly essays (20 pts each), and ten weekly online discussions (20 pts per week). The following letter grade equivalents shall apply:

A 93-100	A90-92	B+ 88-89
B83-87	B80-82	C+ 78-79
C77-73	C70-72	D+68-69
D63-67	D60-62	E00-59

Exams (100 pts each): There will be five exams during the course of the semester; four section exams and a comprehensive final. Each exam will consist of multiple choice, short answer, and essay questions. The exams are taken via Chi-Tester and need to be completed at one of the Weber State University Testing Centers. If you are not familiar with chi-tester please visit the following website for details on how exams are completed using this method <a href="http://chitester.weber.edu">http://chitester.weber.edu</a>. If you are taking this course long distance (50 miles away from a WSU testing-center) then you may take the exams via Chi-tester by following the proxy procedure outlined on the chi-tester website. If you are going to use a proctor you need to set it up as soon as possible. In order to set up a proctor you need to go to the chi-tester homepage using the above link. After logging in, you need to choose the "distance test" tab. Follow the instructions provided. Be aware that some proctors charge a fee for their services. You only have to take four exams! You only have to take the comprehensive final if you missed a previous exam, or you would like the final to take the place of one of the section exams. The comprehensive final will be primarily essay and short answer.

**Make-up Exams:** Each exam period is listed on the syllabus; as you have a five day period in which to complete the exam, and you have the option of taking the comprehensive final to account for a missed exam there will be no make-up exams given.

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**Weekly Essays** (**20 pts each**): Each week, you will be required to submit an answer to a posted essay question. I will post a question on Sunday evening addressing the weekly material. You are to answer this question and submit the answer to me by Saturday evening. Answers should be between 500 and 750 words.

Online Discussion Participation (10 pts each – 20 pts per week): As a student in this class, it is your responsibility to keep up with the readings and participate in online class discussions. Discussion topics will be posted at the beginning of each week. You should respond to this initial posting, and respond to another post or start another discussion thread related to the class materials during the week. That is, you must post, at a minimum, two comments per week. I would really prefer this discussion to be fairly theoretical in nature, but not esoteric. However, I do expect some questions and comments related to research or conceptual understanding. You will be graded on the quality of your posts. Simple comments of agreement are not acceptable. Your comments should reflect contemplation and understanding of the material.

#### **Course Policies and Expectations:**

Attendance: A comment about attendance for an online course seems somewhat arbitrary. However, I do expect you to spend a reasonable amount of time on the course website. This time will be spent viewing PowerPoint presentations and videos, engaging in course discussion, and completing assignments. Cognition is a course that some students wrestle with, not because of the complicated nature of the material, but because cognitive psychology takes an engineering approach to mental processing. This approach is a drastically different way of thinking about psychological processes, and one with which most students are not readily familiar. Therefore, I highly encourage you to ask questions when you don't understand some concept. I have set the website so that you can see which of your other classmates is online or when I'm online. Please use this resource.

### **Course Courtesy:**

**Discriminatory Harassment:** Weber State University is committed to providing an environment free from harassment and other forms of discrimination based upon race, color, ethnic background, national origin, religion, creed, age, lack of American citizenship, disability, status of veteran of the Vietnam era, sexual orientation or preference or gender, including sexual/gender harassment. Such an environment is a necessary part of a healthy learning and working atmosphere because such discrimination undermines the sense of human dignity and sense of belonging of all people in the environment. Thus, students in this class should practice professional deportment, and avoid treating others in a manner that is demeaning or derisive in any respect.

While diverse viewpoints and opinions are welcome in this class, in expressing them, we will practice mutual deference so important in the world of work. Thus, while I encourage you to share your opinions, when appropriate, you will be expected to do so in a manner that is respectful towards others, even when you disagree with them.

If you have questions regarding the university's policy against discrimination and harassment you may contact the university's AA/EO office (626-6239) or visit its website: <a href="http://departments.weber.edu/aaeeo/">http://departments.weber.edu/aaeeo/</a>.

Academic dishonesty policy: Weber State University imposes specific disciplinary actions in response to incidents of academic misconduct (cheating, plagiarism, etc.). These actions may include admonition, failing grade, failure of course, disciplinary probation, suspension, and dismissal. The specified policies can be found in the WSU Student Code at <a href="http://documents.weber.edu/ppm/6-22.htm">http://documents.weber.edu/ppm/6-22.htm</a>. Cheating will not be tolerated in this or any class at WSU. Any student caught cheating or plagiarizing on any assignment will result is a grade of E. It is your responsibility to understand what constitutes plagiarism, if you have any questions about what constitutes plagiarism please contact me.

#### **Accommodation for Students with Disabilities:**

Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Service Center. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary.

Weber State University policies regarding Services for Students with Disabilities are available on the <a href="http://weber.edu/ssd">http://weber.edu/ssd</a> website.

## **CLASS SCHEDULE AND ASSIGNMENTS**

Week 1 (1/4 – 1/10)	Intro to Cognitive Psychology	Pinker (1997) Ch. 1
Week 2 (1/11 – 1/17)	Perception	
Week 3 (1/18 – 1/24)	Attention	Novotney (2009)
Week 4 (1/25 – 1/30)	EXAM 1	
Week 5 (2/1 – 2/7)	Memory Systems	Glenberg (1997) pp. 1-19
Week 6 (2/8 – 2/14)	Remembering Events	
Week 7 (2/15 – 2/21)	Memory Distortions	Bernstein & Loftus (2009)
Week 8 (2/22 – 2/27)	EXAM 2	
Week 9 (3/1 – 3/7)	Knowledge Representation	Lakoff (1987) Ch.s 1 & 2
Week 10 (3/8 – 3/14)	Language	Gibbs (1994) Ch.s 1 & 2
3/15 – 3/21	SPRING BREAK	
Week 11 (3/22 – 3/28)	EXAM 3	
Week 12 (3/29 – 4/4)	Problem Solving	Mayer (1989)
Week 13 (4/5 – 4/11)	Reasoning & Decision Making	Gigerenzer (2008)
Week 14 (4/12 - 4/17)	EXAM 4	
Week 14 (4/20 - 4/22)	EXAM 5	