Psychology 3500 Cognition Tuesday/Thursday 9:00 – 10:15 SS 323

Professor: Dr. Aaron Ashley **Email:** AaronAshley@weber.edu **Office:** SS 328A **Office Phone:** (801) 626-8743

Office Hours: M-F 1:00-2:00 or by appointment

Please note: The email address listed above is the best way to contact me. When communicating with me via email, use only your Weber State email account to contact me. I will not open email from or respond to non-Weber State email accounts Therefore, any assignment sent from a non-Weber State email account will not be received.

Additionally, I typically respond to email in the morning. This tactic keeps me from perpetually responding to email. I will certainly respond to your emails when I have the chance, but you in most likelihood will receive a response the following morning.

Text: Anderson, J. R. (2010). Cognitive psychology and its implications (7th ed.). New York, NY: Worth Publishers.

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. Cognitive psychologists take an engineering approach to the study of the mind. That is, they develop models to describe the processes of mental activity. 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 different types of 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

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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:

- What is the nature of intelligence?
- How do humans and computers differ in the way they deal with information?
- How does the mind generally work such that it can solve the problems it solves?
- Different theories of 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 Materials: 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 material 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 weekly quizzes (10 pts each), weekly commentaries (10 pts each), and weekly class participation (100 pts). The following letter grade equivalents shall apply:

A 93-100%	A90-92%	B+ 88-89%
B 83-87%	B80-82%	C+ 78-79%
C 77-73%	C70-72%	D+ 68-69%
D 63-67%	D60-62%	E 00-59%

Weekly Quizzes (10 pts each): There will be weekly quizzes based on the material covered in class and in the text. Each quiz may consist of multiple choice, true/false, short answer, or essay questions. The quizzes will be taken via Chi-Tester and can be taken from any computer. The quizzes are timed; you will have 1.5 hours to complete each one. Quizzes must be completed by Sunday at midnight.

Weekly Commentaries (10 pts each): Students must write weekly commentaries on the assigned readings, lecture, and class discussion. Commentaries are to be submitted via email before midnight on Sundays. Commentaries are to consider the implications of the research, integrate the readings with issues discussed in class, are/or raise important theoretical, analytical, or methodological issues. Commentaries are not simply to be summaries of the material. Commentaries should be between 500 and 750 words, double spaced, and should be written at a college level. That is, free of grammatical, spelling, or typographical errors. Any

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papers containing an unacceptable amount of errors will not be graded. Commentaries are to be submitted in MS Word, WordPerfect, or RTF format. PDFs will not be accepted.

In-class Discussion Participation (100 pts): Discussion and exchange of ideas is an important component of learning. As a student in this class, it is your responsibility to keep up with the readings and participate in class discussion. As part of this process, before each class meeting, the professor will ask students to bring up questions on the assigned readings and/or issues they raised in their commentaries. I expect the discussion to be theoretical in nature, but not esoteric. I do, however, expect you to have some questions and comments related to research methodology or conceptual understanding. Simple comments of agreement are not acceptable. Your comments should reflect contemplation and understanding of the material. At the end of the course, you will earn a grade for class discussion/participation as follows:

(100 pts) Excellent class participation/attendance throughout the course. Participation generally reflected careful reading of the course material. Questions were generally thought-provoking and relevant to the material.

(75 pts) Good participation/attendance throughout the course. Participation questions generally indicated that the material (chapters and articles) had been read and given some thought.

(50 pts) Good participation some days, weak participation other days. Questions not very thoughtful or thought-provoking.

(25 pts) Very little participation. Questions asked did not necessarily reflect a careful reading of the course material.

(0 pts) Poor attendance and participation

Course Policies and Expectations:

Attendance: Attendance is not required for this class; it is, however, highly encouraged that you attend all classes. As a portion of your grade comes directly from class participation, and you have to be present to participate, it is in your best interest to attend every class. As a student, you are responsible for all lecture materials and announcements made in class whether you are present or not. Because this course covers a broad overview of concepts and theories in psychology, attendance is very important and may determine final grades in borderline cases. Additionally, you are expected to be present, attentive, and participate during the entire class period. I do not expect you to arrive late, nor do I expect you to leave early. Both of these are disruptive to the class, and will not be tolerated. I understand an occasional instance, but repeated cases will result in a reduction of participation points. 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.

If you must miss class, do not contact me with questions about what was covered in class. At this point, you are to obtain the names, email addresses, and phone numbers of four of your class mates. These are the people that you should contact in case of a class absence. Only after contacting these individuals, obtaining class notes, and preparing the assigned materials are you to contact me. I'm happy to help you learn the material, but only after you have taken the time to prepare and review what you have missed.

Name:	Email:	Phone:	
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If you contact me via email, use only your Weber State email account, because I will not open email from or respond to Non-Weber State email accounts.

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: http://departments.weber.edu/aaeeo/.

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 http://documents.weber.edu/ppm/6-22.htm. 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 http://weber.edu/ssd website.

CLASS SCHEDULE AND ASSIGNMENTS

The Science of Cognition	Syllabus/Chapter 1
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Perception	Chapter 2
Attention & Performance	Chapter 3
Mental Imagery	Chapter 4
Representation of Knowledge	Chapter 5
Human Memory: Encoding & Storage	Chapter 6
Human Memory: Retention & Retrieval	Chapter 7
Problem Solving	Chapter 8
Expertise	Chapter 9
Reasoning	Chapter 10
Judgment & Decision Making	Chapter 11
Language Structure	Chapter 12
Language Comprehension	Chapter 13

^{*}Please remember, this schedule is tentative and subject to change at the Instructors discretion.