

Cognitive Psychology (PSY 3120, CRN 22951)
Spring 2010, Jan. 11 – May 6
Prof. Robert Carlson

Class Information

Class Days: Tues. & Thur.

Class Time: 9:00 – 10:15

Class Location: Udvar-Hazy 204

Contact Information

Office: McDonald 201

Phone: 652-7893

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Contacting Prof. Carlson: The most effective way to contact me is by e-mail. I check my e-mail regularly, and I am much more likely to remember to respond to an e-mail than to a phone message or a verbal conversation. If you speak to me in person, make sure to follow up that conversation with an e-mail to remind me to promptly address the matter.

Course Description: “Introduction to basic principles of human and non-human cognition. Topics include perception, categorization, attention, memory, knowledge representation, judgment and decision making, and problem solving.” (Description from Course Catalog) Basically, we study many aspects of human behavior that are not directly observable. We learn how objective scientific approaches can be used to infer how mental processes are working “behind the scenes.”

Course Objectives: The purpose of this course is to teach students scientific approach toward the study of the mind. Students will demonstrate their learning through short quizzes and longer exams. This course does not fulfill a general education requirement.

Course Requirements and Information:

Textbook: *Cognition: Exploring the Science of the Mind*, 3rd Edition. (Required)

Other Articles:

Halpern, M., and Miller, G. Online dialog re: Disclaimer by George Miller, retrieved online from members.shaw.ca/philip.sharman/miller.txt.

Miller, G.A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *The Psychological Review*, 63, 81-97.

Blackboard: We will use Blackboard Vista on a regular basis. (Required)

Office Hours: Mon., Wed. & Fri., 11:00-12:00; Tue. & Thu., 1:00-2:00.

Prerequisites: PSY 1010

Course Fees: None

Academic Integrity: Cheating of any kind is not tolerated. Students must take all quizzes and exams independently (without the help of others, except for appropriate disability services). For further information regarding student responsibilities related to academic integrity, please refer to Section 5.33.5 of the DSC policy, which can be viewed at <http://www.dixie.edu/humanres/policy/sec5/533.html>. Other portions of this policy are also relevant, especially as they relate to fostering a learning environment that does not discriminate and is conducive to learning.

Attendance Policy: Learning is a collaborative process, so to maximize your learning in this course I strongly recommend that you attend class regularly and participate in class discussions. The correlation between class participation and grades is quite strong, so it is in your best interests to be an active, and not a passive, participant. Absences may be for a variety of reason, including for approved school functions, but even when appropriate

protocol has been followed regarding excused absences the student is required to find out about and make up missed work (i.e., quizzes and exams). Arrangements to take quizzes or exams ahead of time (never after the due date) **must be made ahead of time** and approved by the instructor. It has been rare for me to grant make-up exams after the exam is scheduled, but it is common for me to allow students to take an alternate exam before the exam is scheduled.

Classroom Policy: All students are encouraged to participate in classroom discussions, but appropriate levels of maturity and respect (to the instructor and other students) must be demonstrated.

Grading Information: Final grades in this course will be based on a percentage-based system, and there will **not** be a “curve” used to determine grades.

Grade Components: Quizzes (15%), Midterm Exams (60%), Final Exam (25%).

Quizzes will be administered through Blackboard Vista. You can take the quizzes any time it is convenient up to a half-hour before the next class period. The material covered on the quiz will be the next class period’s reading assignment.

Midterm Exams will be administered in class on the day specified in the syllabus (see below).

Grading Scale	
Grade	Range
A	>91%
A-	89-91%
B+	86-88%
B	82-85%
B-	79-81%
C+	76-78%
C	72-75%
C-	69-71%
D+	66-68%
D	62-65%
D-	59-61%
F	<59%

Grading

Grading will be based on three criteria: three Midterm Exams (60% total), a Final Exam (25%), and quizzes (15%).

Midterms: There will be three Midterm Exams in this course. Each exam will consist of a combination of true/false and multiple choice questions, with fill-in-the-blank questions. All exams will be administered in class on the date specified on the syllabus. Your highest-scoring Midterm Exam will count 25% toward your final grade, the second-highest Midterm Exam will count 20%, and the lowest-scoring Midterm Exam will count 15% toward your final grade.

Final: The Final Exam will be administered during Finals Week and will cover material discussed throughout the semester. Your score on this exam accounts for 25% of your final grade and will follow the same format as the midterm exams.

Quizzes: Quizzes must be taken before each class period when there is a reading assignment, and the quizzes must be taken through Blackboard. The quizzes will be short (typically 3-7 questions) and will test your understanding of the basic concepts from the assigned readings for that class period. The combined value of all quiz scores will comprise 15% of your final grade. The lowest 3 quiz scores will not be factored into your grade (i.e., they will be “dropped”). **No make-up quizzes will be offered.** If you are likely to miss a significant period of time and will not be able to take a quiz, you may request to take a quiz in advance. Please contact me **at least 24 hours in advance** to make these arrangements.

Make-up Exam Policy

Make-up exams are not allowed, except in the event of *extreme* and *unanticipated* circumstances. If there is a reasonable reason to believe that a situation will arise that might prevent you from taking an exam at the scheduled time (such as participation in an approved extra-curricular activity), it is your responsibility to make arrangements with the instructor *ahead of the scheduled exam date*. At least 2 days' notice is customarily expected, and more time may be required in many cases to make adequate alternative arrangements. **Make-up quizzes are never allowed.**

Grade Calculation: Grades are calculated based on percentages, not total points. For example, if you score 4 out of 4 on one quiz, that counts as a grade of 100%; if you score 4 out of 5 on another quiz, that counts as a grade of 80%. Those two quizzes would lead to a Quiz Average of 90% (average of 80% and 100%), not 88.9% (8 out of 9 total points). The same principle applies to Midterm Exam grades. **The total number of points does not matter, only percentages for each quiz and exam.** To calculate your grade for the class, first calculate your Quiz Average (QA) by averaging the **percentage scores** from each quiz, except for the three lowest quizzes which are not counted toward your grade. Next, calculate your Midterm Average (MA) by averaging the **percentage scores** from your Midterm Exam scores, with the highest two Midterm Exam scores each counting 25% of your grade and the lowest Midterm Exam score counting 15% of your grade (based on each midterm's percentage score). To calculate your overall grade, use the following formula:

$$(QA\% * .15) + (ME1\% * .25) + (ME2\% * .20) + (ME3\% * .15) + (FE\% * .25)$$

This sum will be your total percentage grade in the course; use this figure to determine your letter grade in the course based on the Grading Scale listed above.

Course Outline

The reading assignments are listed below for each class meeting date. If the source of the reading is Reisberg, the reading is from the required textbook; otherwise, the reading is available on Blackboard. You are responsible to make sure you have access to Blackboard in order to look at all handouts. You are welcome to read the documents electronically directly through Blackboard or to print them out to have a paper copy, but when readings are assigned that are available on Blackboard I will expect that you received them.

Course Schedule

<u>Date</u>	<u>Reading Description</u>	<u>Pages</u>
Tue., Jan. 12	Introduction to the Course	---
Thu., Jan. 14	The science of the mind	Reisberg: 4-23
Tue., Jan. 19	Sensation and perception (vision)	Reisberg: 40-54
Thu., Jan. 21	Visual object recognition	Reisberg: 59-73
Tue., Jan. 26	Feature nets and word recognition	Reisberg: 73-94
Thu., Jan. 28	Attention: Costs and benefits	Reisberg: 97-110
Tue., Feb. 2	Attention theories	Reisberg: 110-128
Thu., Feb. 4	Visual imagery: like perception	Reisberg: 339-355
Tue., Feb. 9	Visual imagery: not like perception	Reisberg: 355-370
Thu., Feb. 11	Midterm Exam 1	---
Tue., Feb. 16	The magical number 7±2	Miller; Halpern & Miller
Thu., Feb. 18	Working memory defined	Reisberg: 133-148
Tue., Feb. 23	Memory acquisition	Reisberg: 148-164
Thu., Feb. 25	Encoding and retrieval	Reisberg: 167-178
Tue., Mar. 2	Implicit memory and amnesia	Reisberg: 178-195
Thu., Mar. 4	Memory errors	Reisberg: 199-211
Mar. 8-12	Spring Break (no classes)	---
Tue., Mar. 16	Better long-term memory	Reisberg: 211-231
Thu., Mar. 18	Long-term memory networks	Reisberg: 235-250
Tue., Mar. 23	Retrieving from long-term memory	Reisberg: 250-265
Thu., Mar. 25	Midterm Exam 2	---
Tue., Mar. 30	Conceptual and Generic Knowledge	Reisberg: 267-299
Thu., Apr. 1	Language basics	Reisberg: 301-315
Tue., Apr. 6	Language rules	Reisberg: 315-336
Thu., Apr. 8	Heuristics	Reisberg: 375-407
Tue., Apr. 13	Reasoning and logic	Reisberg: 409-425
Thu., Apr. 15	Decision making	Reisberg: 425-442
Tue., Apr. 20	Problem solving	Reisberg: 444-467
Thu., Apr. 22	Creativity	Reisberg: 467-476
Tue., Apr. 27	Midterm Exam 3	
Thu., Apr. 29	Final Exam Review	
Tue., May 4	8:00 a.m. – 10:00 a.m. – Final Exam	All of it
Fri., May 7	Final Grades Posted	---

