

Psychology 225
Cognitive Psychology
Spring 2001
Tu/Th 11:00-12:15, Wilson Hall 316

Instructor:	Dr. Thomas Palmeri
Office:	507 Wilson Hall
Phone:	343-7900
Email:	thomas.j.palmeri@vanderbilt.edu
Course WWW:	http://www.psy.vanderbilt.edu/faculty/palmeri/p225/syllabus.html
Office Hours:	Tu/Th 9:00-10:00

Course Overview

This course is an introduction to cognitive psychology. The fundamental goal of this area of study is to understand the nature of human thought processes and how they work. Some of the issues we will examine include: How do we perceive objects and events in the world? What are the processes involved in learning and remembering? How is knowledge organized in memory and how do we access that knowledge? What are the processes involved in problem solving, decision making, and reasoning? What is the nature of expertise? What is creativity? What is intelligence? How do we understand and produce spoken and written language? Are there unconscious thought processes? What areas of the brain are involved in various cognitive processes? How does brain damage effect cognition?

E-mail Accounts

I expect that students know how to access their e-mail accounts. Students should use e-mail to transmit comments or questions to the instructor. From time to time, I will also send email announcements out to students in the class. I expect that everyone will check their email at least once every other day.

World Wide Web

I have created a web site for this course: <http://www.psy.vanderbilt.edu/faculty/palmeri/p225/syllabus.html>
The web site will be updated with important and useful information throughout the semester. Information on the web supercedes information given on the syllabus handed out on the first day of class. You will find copies of all lecture notes, exam study guides, and links to other WWW sites.

Required Readings

- A : Anderson, J.A. (2000). *Cognitive Psychology and Its Implications, 5th Edition*.

Vanderbilt's Honor Code Governs All Work in this Course

Course Outline

Note: You can expect that the schedule of topics and schedule of readings will change throughout the semester. I will announce changes in class. And an up-to-date schedule will be kept on the course web page. Although topics and readings will change, the dates of the examinations will not change.

Week 1	1/10	Preliminaries	A : 1-35
Week 2	1/15	Neuroscience and Perception	A : 36-53
	1/17	Object Recognition	A : 53-57, 63-64
Week 3	1/22	Attention	A : 74-96
	1/24	Automatic and Controlled Processing	A : 97-104
Week 4	1/29	Perception-Based Knowledge	A : 105-135
	1/31	Meaning-Based Knowledge	A : 136-151
Week 5	2/5	Exam 1 (45 points)	
	2/7	Categories and Concepts	A : 151-169
Week 6	2/12	Memory	A : 86-88
	2/14	Sensory and Short-Term Memory	A : 170-175
Week 7	2/19	Working Memory	A : 175-180
	2/21	Long-Term Memory	A : 181-200
Week 8	2/26	Long-Term Memory	A : 201-230
	2/28	Exam 2 (45 points)	
<i>--- Spring Break ---</i>			
Week 9	3/12	Implicit Memory	A : 230-238
	3/14	Eyewitness Testimony and Repressed Memories	
Week 10	3/19	Problem Solving	A : 239-278
	3/21	Problem Solving	A : 239-278
Week 11	3/26	Insight and Expertise	A : 279-313
	3/28	Reasoning and Judgment	A : 314-344
Week 12	4/2	Decision Making	A : 344-352

	4/4	Exam 3 (45 points)	
Week 13	4/9	Introduction to Language	A : 353-387
	4/11	Speech Perception and Production	A : 57-65
Week 14	4/16	Syntax	A : 358-367, 388-413
	4/18	Semantics	A : 413-421
Week 15	4/23	Language Acquisition and Linguistic Relativity	A : 367-387
	4/29	Final Examination (65 points)	<u>9:00 Monday April 29</u>

Again, you should expect deviations from this schedule of topics during the semester. Any changes are at the discretion of the instructor and will be announced in class and posted on the web page. However, I will not change the dates of any of the examinations.

Exam Schedule

Exam 1	<u>Tuesday February 5</u>	Material from weeks 1 through 4.
Exam 2	<u>Thursday February 28</u>	Primarily material from weeks 5 through 8.
Exam 3	<u>Thursday April 4</u>	Primarily material from weeks 9 through 12.
Final Examination	<u>3:00 PM Saturday April 29</u>	Cumulative Examination (with some emphasis
Alternate Final	<u>12:00 noon Thursday May 2</u>	on material from weeks 13 through 15).

Examinations

All examinations will cover material from lectures, demonstrations, videos, and the required readings. Please note that the lectures are designed to complement, not necessarily repeat, material in the text; just because something in the readings was not specifically discussed in class does not mean that it is unimportant. The exams will consist of multiple choice items, phrases/concepts requiring brief definitions, and short essays.

Make-up Exams

If you have any conflicts of any kind (personal, academic, or professional) that might prevent you from taking an exam during the regularly scheduled time, you must let me know during the first two weeks of the semester. Otherwise, make-up exams will only be given in documented cases involving family or medical emergencies. In case of emergencies of this sort, you are expected to contact the Dean of Students. The dean will send out a memo to all your faculty documenting your illness or family emergency. Any undocumented absences will count as a zero in determining the final grade.

Class Participation

Because this is a very small class, I expect that people will come to class ready to ask questions they may have and to answer any questions I may pose to the group. In addition, I may from time to time hand out short assignments related to the topic under discussion. Class participation is worth 25 points.

Assignment of Grades

Your final grade will be based on the total points accumulated on the exams. Each in-class exam is worth 45 points, the final is worth 65 points. Class participation is worth 25 points. This gives a total of 225 possible points. Final grades are based on total points, according to the percentage distribution shown below:

A	92.5% - 100%
A-	90.0% - 92.5%
B+	87.5% - 92.5%
B	82.5% - 87.5%
B-	80.0% - 82.5%
C+	77.5% - 80.0%
C	72.5% - 77.5%
C-	70.0% - 72.5%
D+	67.5% - 70.0%
D	62.5% - 67.5%
D-	60.0% - 62.5%
F	< 60.0%

Extra Credit

You have the opportunity to earn a maximum of FIVE extra credit points during the semester. There are two ways you can earn these extra credit points that are outlined below. Note that earning the maximum amount of extra credit might be enough to raise your final grade by half a letter grade (e.g., going from a B+ to an A-). I must stress that simply turning in something does not guarantee that you will earn the full amount of extra credit. I will be carefully grading what you turn in and assign extra credit accordingly (giving partial extra credit where appropriate).

OPTION #1 : Attend a Cognitive Talk on Campus (3 points maximum)

Throughout the semester, there will be a number of research talks around campus on some aspect of cognition, perception, cognitive development, or cognitive neuroscience. I will try to announce these talks in class. You can also get information on upcoming talks by checking out the course web site.

To earn one point of extra credit, you must attend the talk and then write up a one to two page summary of what you learned (at least 500 words). Some of the talks may be quite technical and the research topic will probably be a bit esoteric, so I do not necessarily expect that you will get most of the details right. In writing your summary, you should indicate the title of the talk, the name of the speaker, and the time and date of the talk. Write a brief summary of the main issues the research was addressing, try to briefly summarize the experiments and results, describe the conclusions of the research, and then feel free to comment on any aspects of the talk that you found confusing or perhaps even downright incomprehensible. Do your best and don't get overwhelmed. Keep in mind that the intended audience for nearly all of these talks are professors, postdoctoral fellows, and graduate students, not undergraduates. I will not be grading you on how accurately you portrayed the content of the talk, but on how well you are able to articulate what you learned by attending the talk.

Again, you earn one point in extra credit for each talk attended and summarized. You can earn a maximum of three points extra credit under this option.

You must turn in your written summary within one week of the talk.

OPTION #2 : Cognition in the Real World (3 points maximum)

Find a story from the news on some aspect of cognition in the real world and summarize how it relates to what we've talked about in class, relating it to specific experimental findings where appropriate. If it appeared in the newspaper or on the web, include a copy of the story. If you heard it on the radio or saw it on television, try to get a transcript (which can usually be obtained for free on the web or for a small mailing fee); at least document when you heard it and on what radio or television station. If you find something on a topic we have not yet discussed in class (e.g., failure in decision making will be talked about at the end of March) try to hold off on writing about the story until we've discussed the topic so you can relate the story to some experimental research.

Lots of things would be appropriate for this option. For example, you might find something in the news about how a car accident or a plane crash was attributed to human error. What specific kinds of human error (failures in cognition) were at fault (e.g., failures in decision making, failures in attention, failures in reasoning, failures in language understanding, failures in problem solving, and so on). Or you might see a story about someone who is an expert in some domain or perhaps read about a computer or robot that allegedly displays some level of expertise. Or you might see something on ways to improve human cognition (e.g., intelligent tutoring systems, warning devices, new learning techniques, memory improvement methods, drugs to improve cognitive functioning). If you are not sure about whether a particular story would be appropriate to write about, feel free to come by and show me what you've found.

You can earn one point in extra credit by writing a one to two page (at least 500 words) summary of cognition in the real world and relating it to experimental findings on human cognition we've discussed in class. Make sure you turn in a copy of the source (from a magazine, the newspaper, the web, or a transcript if possible). You can earn a maximum of three extra credit points under this option.

Enrollment in this course represents your acknowledgment and acceptance of these non-negotiable policies