Course Syllabus, Psychology 221, Cognitive Psychology, Fall 2006 (subject to change)

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Required Texts: *Cognitive Psychology: Connecting Mind, Research, and Everyday Experience* – E. Bruce Goldstein
Concept Maps and CogLab Online Manual – bundled FREE with text
CogLab E-pin number – bundled FREE with text (MUST PURCHASE NEW)

Textbook Companion Website: **http://tinyurl.com/e3bkq**. This is a nice web site that includes many study aids (e.g., flashcards, sample quizzes, crossword puzzles) which can help you gauge how well you understand the material. I highly encourage you to take advantage of this free site.

Course Overview & Objectives

This course provides an in-depth exploration of human cognition, focusing on both classic and current issues. The study of cognition relies heavily on experimental research designed to test models and theories of cognitive processes, and we will explore both behavioral and neuropsychological approaches to data and theory. Topics will include attention, perception, multiple memory systems, encoding and retrieval processes, the role of knowledge, language, and reasoning.

Given the wide variety of topics in cognitive psychology, my major objective for this course is to help you develop expertise in it. Additionally, you will gain experience in cognitive research methodology, both by participating in a number of classic research studies as well as by designing and conducting a group research study of your own. A final course objective is to enhance your ability to think critically and scientifically about everyday cognitive problems (e.g., "How can I study more effectively so that I understand the material better and perform better on tests?") so that you can try to generate effective solutions for yourself.

Prerequisite

A passing grade (i.e., a D or higher) in a college-level Introductory Psychology course is a University prerequisite for this course. My own STRONG recommendation is that you should have received at least a C+ in your introductory course. I give this advice because you will probably find this course challenging, due in large part to the theoretical and experimental nature of the research we will discuss. You will also be required to do quite a bit of reading, so please be prepared for some hard work and effort.

Evaluation

Your final grade in this course will be based on the total points you accumulate from four exams, eleven CogLab experiments, a group project and paper, comment cards, attendance, and participation.

A. Course Readings and Comment Cards (35 points possible)

In order to fully understand the course material, as well as to do well in this course, it is *crucial* that you stay current with the assigned readings. The class will include both lecture and discussion, so you need to come to class fully prepared each day to discuss the assigned material. Therefore, in order for me to ensure that you are staying current, all students will be asked to turn in index cards (i.e., "Comment Cards") at the start of every class session (you will get these cards from me). On these cards, you will be asked to *react* to the assigned reading for that day. Basically, I would like you to show me on these cards that you are thinking about the reading and attempting to understand what the author is telling you. You might want to comment on something the author says, or relate it to something that you've encountered before. You may even ask questions about what you read if you don't understand something, *but a simple question by itself is not enough.* If you ask a question, elaborate upon why you're unclear. What specifically don't you understand? Where did the author lose you? Almost anything is fair game as long as you can show me that you're actively attempting to process the textbook information. What I do not want is a simple summary of what you read. Summaries don't require you to think about the information and I want you to show me that you are actively thinking about what you are reading. When you write your card, please include the following: (1) your name; (2) the date; (3) the page number from which your comment is drawn; and (4) your comment.

At the start of every class session, you will place your card into a file box that will be passed around. Each response will be graded on a credit/no credit basis, with each card being worth 1 point, up to a total possible of 35 points. Even if you haven't read the assigned reading please turn in a card with your name on it for attendance purposes. If you miss class but would still like to receive credit for the note card, simply turn in the missing note card during the next class period. I will not, however, accept cards more than one class period late. *If you are in class, your note card must be turned in on that day*.

B. Exams

There will be four exams in the course. The final exam will *not* be comprehensive, but will simply cover information from the last unit. The exams will consist of multiple choice, matching, short-answer, and essay questions. The questions will be taken from class material, the CogLab experiments, and the textbook. You will be held responsible for all of the information covered in each chapter, not just the topics discussed in class, so be sure and read each chapter carefully.

C. CogLab Web Experiments – www.coglab.wadsworth.com (110 points; 11 experiments @ 10 points each)

Each student must have their own valid CogLab E-pin number purchased with the textbook bundle from the bookstore. Please note that old E-pin numbers used by other students won't work. The E-pins are only good for a single semester and associated with a specific student and course. Additionally, each of you must contribute your own unique data to each experiment (associated with your unique username and log-in ID). I am able to track individual student participation in each experiment, so please don't try and share an E-pin code.

You will be required to complete eleven of the CogLab experiments in this course. The assigned experiments and their due dates (completed by the start of class) are listed in the "Course Outline" section at the end of this syllabus. To participate in the CogLab experiments, you will need the E-pin bundled with the textbook, along with a UserID and password that you will receive from me. Detailing instructions on how to register and get started are provided on the last page of this syllabus. Each study requires approximately 20-30 minutes and can be completed at any computer with web access. Each study must be completed by the date assigned in the syllabus, but you may certainly complete them in advance should you choose. The fact that these experiments are web-based means that you can participate in these studies at any hour, day or night. Therefore, NO LATE ASSIGNMENTS WILL BE ACCEPTED.

For each study, the software will keep track of who has completed the study and will tabulate data for each student. You need only to complete the web experiment; *there is nothing to hand in to me.* I will compile the data and use it as a basis for class discussion. Because I will discuss the findings in class, all experiments must be completed on time. It is to your advantage to complete every experimental assignment, not only because you earn points for each experiment, but also because the content of the studies will be covered on your exams. These are very simple assignments to complete, and if you simply participate in the web program you will receive full credit – so do them!

Although I do not anticipate this issue, failure to complete at least <u>seven</u> of the CogLab experiments by their due dates will result in the loss of one letter grade (e.g., a B+ to a C+). Failure to complete at least <u>four</u> on time will result in the loss of two letter grades. Failure to complete any of the experiments on time will result in an automatic F for the course.

D. Group Project & Paper

In a few weeks, specific guidelines will be distributed concerning this project. Briefly, students will work in small groups on a major research project and paper assignment. On Friday, December 8, all of the projects will be presented during a "Cognitive Psychology Research Fair." Faculty, students, and friends will all be invited to the fair and each team of students will present and discuss each of their research projects. In addition to the presentation itself, each student will individually submit a paper describing and discussing the project.

E. Attendance (35 points possible)

Attendance is essential to understand the concepts and processes explained in the reading material. All students will start off with 35 attendance points. A student will be allowed to miss three class periods, for any reason whatsoever, without penalty (this includes illnesses). Any absences over three will result in the loss of two points per absence.

F. Participation (75 points possible)

I fully expect every member of this class to be an active participant in class discussions. Therefore, to encourage and reward class participation, active participation is mandatory and expected. Your contributions, either by asking or answering questions

or sharing examples, will not only make the course more enjoyable, but will also help you actually *understand* the material better. Your participation score will be based on my assessment of the quality and quantity of your contributions.

Final Grade

Your final grade in the course will be based on the percentage of the points you have accumulated out of the total number of possible points. Grades will be determined using the grading scale listed below. For example, if a student accumulated 863 points out of 1000 possible points, they would have an 86.3%, or a B+. There is no grading on a curve.

92 - 100% of total possible points = A
89 - 91.5% of total possible points = A-
86 - 88.5% of total possible points = B+
82 - 85.5% of total possible points = B
79 - 81.5% of total possible points = B-
76 - 78.5% of total possible points = C+
70 - 75.5% of total possible points = C
60 - 69.5% of total possible points = D
0 - 59.5% of total possible points = F

Course Policies

Cell phones: Please turn off all cell phones by the start of class. If some unique situation requires you to keep you cell phone on, please discuss with me before class begins. Thank you.

Make-up Exams: The opportunity to make up a missed exam is a privilege, not a right, and will only be considered in cases of extreme unforeseen events. In the case of a serious problem, it is your responsibility to contact me by telephone BEFORE the exam is given. I will generally be in my office from 7:00-7:45 a.m. and 9:00-9:45 a.m. on the day of exams, so you need to contact me during these times. If for some reason I do not answer the phone, please leave a message on my voice mail with a number where I can reach you. I WILL NOT ACCEPT EMAIL NOTIFICATIONS; you must phone. No make-ups will be allowed without first contacting me.

Late Papers: As a general policy, I do not accept late papers. The course paper is due *at the start of class* on Monday, Dec. 5. If you are ill on this date, you are still responsible for turning in the assignment by the start of class. You may either have a friend turn in the paper, email it to me, or fax it to me at 771-8404.

Academic Integrity: Academic integrity is the pursuit of scholarly activity free from fraud and deception. A University is a community of scholars, and I expect my students to act in ways that uphold the integrity of this community. All University policies regarding academic integrity apply to this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. For any material or ideas obtained from other sources, such as the text or things you see on the web, in the library, etc., a source reference must be given. Direct quotes from any source must be identified as such. All exam answers must be your own, and you must not provide any assistance to other students during exams. Any instances of academic dishonesty WILL be pursued following Penn State's policy 49-20 (http://www.senate.psu.edu/policies/47-00.html#49-20). If charged with academic dishonesty, you will receive oral or written notice of the charge by me. You and I will then meet to discuss the charge. If you choose to contest the charge, you have the option of contacting Dr. Joseph McCormick, Director of Academic Affairs and requesting a hearing with the Academic Integrity committee at the campus. Sanctions for breaches of academic dishonesty will typically range from failing an assignment with a score of zero to failing the course, although more harsh sanctions exist for especially severe cases.

Plagiarism. Plagiarism has been a recurring problem in some of my psychology courses so my hope is to prevent any further issues if at all possible. The biggest problem I have found is that students are often unclear what constitutes plagiarism. Obviously, copying someone else's writing word-for-word without the use of quotation marks and a reference citation is plagiarism. This is true even if you only copy a few words, a short phrase, or a sentence because the basic ideas and sentence structure are the original author's. Plagiarism also involves paraphrasing someone else's work if you don't provide a proper reference citation, and sometimes paraphrasing comes awfully close to word-for-word copying, especially if you've only changed a couple of words. On the other hand, filling up a paper with many quotations is also unacceptable because the paper doesn't really represent your own thoughts and ideas. Therefore, the best advice I can give you revolves around two suggestions. First, **use quotations very sparingly**, and only when the exact wording of a passage is critical to your main point. Second, **put others' ideas into your own words**, but always remember to include a reference citation of where you got the ideas (e.g., Bower & Brown, 2004). IF YOU ARE EVER IN DOUBT ABOUT PLAGIARISM, ALWAYS ASK FIRST. I will be more than willing to assist you.

In order to help prevent plagiarism, all students will be required to submit their course paper to Turnitit.com. More detailed instructions for how to do this will be provided at a later date.

Students With Disabilities. Penn State is committed to providing access to a quality education for all students, including those with documented disabilities. If a student has a disability and wishes an accommodation for a course, it is the student's responsibility to obtain a University letter confirming the disability and suggesting appropriate accommodation. This letter can be requested from the York campus Disability Contact Liaison, Dr. Cora Dzubak located at the Learning Center. Students are encouraged to request accommodation early in the semester so that, once identified, reasonable accommodation can be implemented in a timely manner.

COURSE OUTLINE (subject to change)
(Important dates are in bold print)

Date	**Reading assignment** (please read *before* class)	**Topic**	**What's Due?**
W, Sept. 6	Syllabus	Course introduction	
F, Sept. 8	Preface, Chapter 1 (pp. 1-12)	A brief history of cognitive psychology	
M, Sept. 11	Chapter 1 (pp. 13-22)	How cognitive psychologists study the mind	
W, Sept. 13	Chapter 2 (pp. 23-39)	A review of neural processing	
F, Sept. 15	No reading assignment	TBA	
M, Sept. 18	Chapter 2 (pp. 40-54)	Physiological techniques	**CogLab: Visual Search**
W, Sept. 20	Chapter 3 (pp. 55–73)	Theories of pattern recognition	
F, Sept. 22	Chapter 3 (pp. 74-82)	The Gestalt approach	
M, Sept. 25	No reading assignment	**Group Project guidelines distributed**	
W, Sept. 27	Chapter 3 (pp. 82-97)	"Intelligence" and perceiving the world	
F, Sept. 29	Chapter 4 (pp. 99-112)	Models of selective attention	
M, Oct. 2	Chapter 4 (pp. 113-120)	Divided attention	**CogLab: Spatial Cueing**
W, Oct. 4	**Exam 1**	**Exam 1**	**Exam 1**
F, Oct. 6	**NO CLASS**	**FALL BREAK**	
M, Oct. 9	Chapter 4 (pp. 120-134)	Visual attention	**CogLab: Partial Report**
W, Oct. 11	Chapter 5 (pp. 135-146)	Modal model of memory; sensory memory	
F, Oct. 13	Chapter 5 (pp. 146-156)	STM vs. LTM	
M, Oct. 16	Chapter 5 (pp. 156-161))	Properties of STM; problems with the model	**CogLab: Phonological Similar.**
W, Oct. 18		TBA	
F, Oct. 20	Chapter 5 (pp. 162-177)	Working memory	

M, Oct. 23	Chapter 6 (pp. 179-192)	Declarative LTM	**CogLab: Levels of Processing**
W, Oct. 25	Chapter 6 (pp. 193-208)	Encoding; storing information in the brain	**CogLab: Encoding Specificity**
F, Oct. 27	Chapter 6 (pp. 209-221)	Retrieval; encoding specificity	
M, Oct.30	**Exam 2**	**Exam 2**	**Exam 2**
W, Nov. 1	Chapter 7 (pp. 223-234)	Memory for personal experiences	**CogLab: False Memory**
F, Nov. 3	Chapter 7 (pp. 234-245)	How memory is "constructed"	
M, Nov. 6	Chapter 7 (pp. 245-264)	Memory is not a video recorder	**CogLab: Prototypes**
W, Nov. 8	Chapter 8 (pp. 265-285)	Categories, prototypes, and exemplars	
F, Nov. 10	Chapter 8 (pp. 286-294)	Semantic networks	
M, Nov. 13	Chapter 8 (pp. 294-307)	Connectionism	
W, Nov. 15	Chapter 9 (pp. 309-316)	Visual imagery	**CogLab: Mental Rotation AND CogLab: Mental Scanning (both are required)**
F, Nov. 17		TBA	
M, Nov. 20		**Exam 3**	**Exam 3**
T, Nov. 21 (Following a Friday class schedule)	Chapter 9 (pp. 316-325)	Visual imagery	
W, Nov. 22	**NO CLASS**	**Thanksgiving Vacation!!**	
F, Nov. 24	**NO CLASS**	**Thanksgiving Vacation!**	
M, Nov. 27	Chapter 9 (pp. 326-344)	Imagery and the brain	**CogLab: Word Superiority**
W, Nov. 29	Chapter 10 (pp. 345-355)	Basics of language comprehension	
F, Dec. 1	Chapter 10 (pp. 355-369)	Word and sentence level effects	
M, Dec. 4	Chapter 10 (pp. 369-374)	Text comprehension and making inferences	
W, Dec. 6	Chapter 10 (pp. 374-386)	Situation models, conversation, and effects of culture	
F, Dec. 8	**Cognitive Psychology Research Fair**	**Project Presentations 11:45 - 12:50**	
M, Dec. 11	Chapter 12 (pp. 427-443)	Deductive reasoning: syllogisms	**Project Papers Due**
W, Dec. 13	Chapter 12 (pp. 443--454)	Deductive reasoning: thinking conditionally	
F, Dec. 15	Chapter 12 (pp. 454-478**)**	Inductive reasoning	
Dec. 18-21		**FINAL EXAMS**	

Instructions for getting started with CogLab

1. Open your Web browser and go to http://www.coglab.wadsworth.com/Information/studentscreate.shtml

2. Go to the bottom of the Web page. There should be three text fields and one button. If these are not visible, your Web browser does not have Java enabled or has an out of date version of Java. Go to the CogLab Browser Check page for details.

3. In the top text field, enter the group ID: *Casteel2006*. In the bottom text field, enter the access password: *cognition*. In the third text field, enter your registration code. The registration code could be in one of several formats. It may be on a sticker on the inside front cover of your CogLab Student Manual. It may have been bundled with your textbook on a postcard. Or, you may have purchased a registration code electronically (sometimes this is also called an e-Pin). Do not purchase used CogLab registration codes! If the registration code has already been used, it will not work for you. Each valid registration code can be used only once. After filling in all the text fields, click on the Submit information button.

4. Your Web browser will connect with the CogLab server to verify your information. If the information is correct, a new window will appear. Make sure that the school name, instructor name, and class name are correct. If they are not, you may have accidentally accessed a different group than your instructor intended. The field marked as 'Your log-in ID:' lists your assigned log-in ID, which you will use to access your CogLab account and complete experiments. You cannot change this log-in ID.

5. Enter your registration code, first name, last (family) name, a password, and a security question and answer. For the security question and answer, try to pick a topic that will be easy for you to know the answer but would be difficult for anyone else (e.g., the name of your first pet).

6. Click on the Apply button. Your Web browser will again connect with the CogLab server to save your data and register your account. If all of your information is valid, your account is ready to go! When your information is saved, your registration code will be marked as being used.

7. When your data is saved, your Web browser will load a new window that lists all the properties of your CogLab account. Especially important is the log-in ID and password. Print or save this Web page for your records. (Note: some pop-up blockers will prevent this window from appearing. If you data does not appear, click the link below the text fields to view this page. Go to the CogLab Browser Check page for details.)

8. To start doing experiments, point your Web browser to http://www.coglab.wadsworth.com. Select the experiment that you want to perform by clicking on the link. Read the information and instructions carefully. At the bottom of the page are two text fields and two buttons. Enter your log-in ID and password and then click on the Submit information button. After your log-in information is verified, the Start experiment button can be selected. Click on the Start experiment button to open a new window where the experiment will take place. You need to read the instructions before you can complete the experiment!

9. At the end of the experiment, the browser window will load a summary of your data for the experiment. When you see this window, you are finished with the experiment.

10. You can access details about your account, and view averages from your group and across the nation by directing your Web browser to http://www.coglab.wadsworth.com/Information/studentsaccess.shtml.