

Course Syllabus
PSY 365: Cognition (01)
Department of Psychology
Spring 2018

T / TH 8:30 am - 11:50 am; Eberhard Center 410

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Prerequisites: PSY 101: Introductory Psychology

Course Description

This course concerns itself with the *science of mind*. The contents and processes of mind such as thinking, reasoning, perceiving, attention, memory, knowledge and language are of central interest to theorists and researchers in the areas of cognitive psychology and cognitive science in general. This course will provide a historical background to the modern science of mind, illustrate some pertinent research methods, and cover some important *empirical findings* and theories in the study of cognition.

Course Objectives: Upon successful completion of this course students will be able to:

1. **Summarize** the important methods, research findings, and theories of cognition.
2. **Evaluate** current issues in cognition research.
3. **Compare** the strengths and weaknesses of various theories of cognition.
4. **Explain** how cognition is studied empirically.

Textbook (Required):

Cognitive Psychology: Applying the science of the mind. Third Edition. (2012), by Gregory Robinson-Reigler & Bridget Robinson Reigeler, Allyn & Bacon.

E-Reserved Readings (Required):

- De Neys, W. (2006). Dual processing in reasoning. Psychological Science, *17*(5), pp. 428-433.
- Evans, J. St. B. T. & Curtis-Holmes, J. (2005). Rapid responding increases belief bias: Evidence for the dual-process theory of reasoning. Thinking & Reasoning, *11*(4), pp. 382-389.
- Colom, R., et al. (2003) Working memory and intelligence. Personality and Individual Differences, *34*, pp.33-39.
- Pavani, F., Spence, C., & Driver, J. (2000). Visual capture of touch: Out-of-body experiences with rubber gloves. Psychological Science, *11*, 353-359.
- Pylyshyn, Z. (2003). Return of the mental image: Are there really pictures in the brain? TRENDS in Cognitive Sciences, *7*(3), 113-118.
- Roediger, H. L. & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention, Psychological Science, *17*(3), 249-255.

- Roediger, H. L. & Marsh, E. J. (2005). The positive and negative consequences of multiple-choice testing, Journal of Experimental Psychology: Learning, Memory, and Cognition, 31(5), 1155-1159.
- Satel, S. & Lilienfeld, S. O. (2013). Losing our minds in the age of brain science, (Introduction; pp. ix-xxiii). From Brainwashed: The Seductive Appeal of Mindless Neuroscience.
- Shipstead, Z., Redick, T. S. & Engle, R. W. (2010). Does working memory training generalize? Psychologica Belgica, 50, 245-276.
- Shimamura, A. P. (2010). Bridging psychological and biological science: The good, bad, and ugly. Perspectives on Psychological Science, 5, 772-775.
- Stanovich, K. E. (2013a). Falsifiability: How to foil little green men in the head. Chapter 2 (pp. 21-36) from How to Think Straight About Psychology (10th Ed.)
- Stanovich, K. E. (2013b). Operationism and essentialism: "But, doctor, what does it really mean?" Chapter 3 (pp. 37-52) from How to Think Straight About Psychology (10th Ed.)

It is **important** that you keep up with the assigned readings throughout the entire duration of the course. Assigned readings will be officially announced in class. E-reserve readings will also be indicated via the due dates of the reading assignments (see page 3.) Additional readings may be added on to the above E-reserve listing (& not all of the above may be assigned). Any modifications will always be announced in class.

Course Evaluation (100 points total)

Midterm Exam:	30 points or 40 points
Final Exam:	40 points or 40 points
*Your highest exam score will be weighed out of 40 points in your final grade calculation (lowest exam score weighed at 30 points)	
Quizzes (4)	12 points (3 points each)
Assignments & In-Class Activities	15 points
Journal Article Review:	3 points
Total:	100 points

Exams (2)

Exams will consist of multiple choice questions, fill in the blank and short answer questions. Questions will be drawn from both lectures and assigned readings. Although there will be much overlap between lecture material and assigned readings, I will present non assigned reading material in lectures and will also not cover all assigned reading material in class. A consequence of this is that a significant portion of exam questions will comprise of material that is unique to lectures, and material that is unique to assigned readings. In other words, to do "well" on the exams you must do both the assigned readings and attend class (which means paying attention and taking good notes--not just physically being there). The final exam will be semi-cumulative.

Quizzes (4)

There will be a total of four (4) non-cumulative quizzes. Quizzes will consist of multiple choice and fill in the blank questions *from the lecture material*. You will have about 15 minutes to complete each quiz. Each quiz is worth 3% of your final grade. These quizzes will primarily serve as a mechanism for reviewing material and clearing up any misunderstandings / confusions prior to the much heavier weighted exams. Each quiz will be given near the start of class and the answers will be taken up immediately afterwards in a brief review session. **There will be no make-ups for missed quizzes. Think of these quizzes as also being attendance points.** Furthermore, as these quizzes will occur early in a class session, **do not walk in late.**

Clarification of what you need to know for any given quiz or exam

Quiz # 1:	all lecture material covered since day 1
Quiz # 2:	all lecture material covered subsequent to quiz # 1 material
Midterm:	all lecture <i>and</i> reading material covered since day 1
Quiz # 3:	all lecture material covered subsequent to Midterm Exam material
Quiz # 4:	all lecture material covered subsequent to quiz # 3 material
Final Exam:	all lecture <i>and</i> reading material covered <u>subsequent</u> to the midterm exam material, <u>and</u> some pre-midterm material designated as cumulative.

Assignments & In-Class Activities (includes pop quizzes)

- (1) You will be given several assignments that will require you to consult the assigned readings. These assignments will be graded on a credit / no credit basis (see below section on assignment credits.) Make sure you retain a personal copy of each completed assignment in addition to the copy you submit to me. All assignments will be due in class and must be typed. **Late assignments will not be accepted.** Each missed or non credited assignment will result in a 1.5 point deduction from this portion of your score.
- (2) There will also be some unannounced in-class activities (also graded on a credit / no credit basis.) Some of these will basically consist of “mini experiments” designed to generate class data that will be incorporated into an upcoming lecture. Some others will consist of **pop Quizzes** which will only be graded on the basis of attendance only (i.e., credited / not credited.) Each missed in-class activity will result in a 1 point deduction from this portion of your score.

Assignment Credits: The following will result in assignments NOT receiving credit:

1. Incomplete assignment (e.g., missing a response to a single question is “incomplete”)
2. Responses in which your own wording was not used
3. Assignments containing responses that do not *clearly* evidence a reflective reading of the material (e.g., responses being overly brief, incomplete, or completely “off-mark.”)

Journal Article Review Assignment

This will be outlined in the short future. Suffice to say for now, that the lecture and reading material on research methods will be particularly relevant to the course paper.

On writing exams & quizzes

On exam/quiz days make sure you bring to class a black lead pencil (#2 or softer) and a “good” eraser. You will be filling out scantron forms.

A point of caution, be conscientious about filling these scantron forms. Bubbles should be filled in properly, and you should thoroughly erase any changed answers. No corrections will be made as a result of errors on your part--think of this as part of the exam/quiz, i.e., can you fill these forms properly?

Attendance

You will not be directly penalized for missing classes. If you must miss a class you need neither secure my consent nor supply me with a reason for the absence. But please note that missing classes will most likely have consequences on your grade in this course: i) I will be presenting material in class that is not covered in the assigned readings; ii) any given assignment must be submitted on the due date in “hard-copy” form at the start of class—no email attachments accepted; iii) any possible in-class activities may be unannounced; iv) **I do not provide lecture notes for missed classes**—please do not ask as I can make no exceptions on this out of fairness to all students; v) you may miss important announcements and/or handouts.

Please DO NOT email me the following (or variants of the following) questions:

1. “I missed class today. Did I miss anything important?”
2. “can you send me the lecture notes that I missed?”
3. “I am going to miss class because . . . will there be an in-class activity today?”

Answers to above questions will always be:

1. “Yes.”
2. “No.”
3. “Maybe.”

You can mitigate some of the above consequences—see the **A helpful suggestion** section below.

On being late for classes

It is a mistake to think that missing the first few minutes of class is harmless. All things being equal, the worst x minutes that you could possibly miss in a lecture is usually the **FIRST** x minutes. Those first few minutes of class is where the stage gets set—so to speak—for all the remaining lecture material. Your comprehension of lecture material will often be “challenged” when you miss the preceding material—even just a few minutes.

A helpful suggestion

Get to know some of your fellow classmates. Pair up with at least one other student as a Lecture-Notes-buddy. That is, in the event you do miss a class, your “Lecture-Notes-buddy” will allow you to photocopy her/his notes for the missed class and inform you of any announcements you missed. **Do not expect the instructor to recap for you an entire missed lecture after class. Do not expect the instructor to provide you the notes for a missed class.**

Our responsibilities:

Both the professor and student have responsibilities in the teaching / learning process.

My responsibilities as an instructor include...

- being well organized
- being courteous and helpful with students
- providing an updated and informative course
- returning graded exams promptly
- being fair and unbiased with grading

Your responsibilities as a student include...

- attending classes and being punctual
- paying attention in class
- taking notes during lectures
- asking questions about material you do not understand
- seeking help with material if you're having difficulty (e.g., meeting with me during an office hour, and/or getting a tutor)
- not creating distractions for other students or the instructor (e.g., excessive talking); **PLEASE SILENCE YOUR CELL PHONES IN CLASS!**
- establishing advanced arrangements with others to recover any material for a missed class
- doing the assigned readings & studying the course material

A note about student dissatisfaction with grades:

An unfortunate reality of any course is that not all students will obtain the final grade they desire. Some students may even fail the course. As an instructor of the course, my responsibility is to ensure that evaluation procedures were fair. To a very large extent, this can be determined by how the class is performing overall. If your performance as a member of this class is substantially below the general class performance, then you cannot simply claim that the evaluation procedures were unfair. Some careful thought has to be given to what else might possibly be wrong, and how it might be changed.

To minimize any damage to your student records, it is important that you consult with me very early once difficulty arises. Don't fall asleep at the wheel--make sure you remain vigilant about your progress in the course.

When students approach me late in the term claiming that they NEED a specified grade, what can I (the instructor) do for them? the answer is nothing. As long as the grading procedures are fair, YOU as a student are in control and responsible for your own grade. As an instructor, I must be fair with the grading procedures, which includes sticking to the same procedures that applied to the entire class. Deviations on my part from the outlined procedures for any one student amounts to cheating those students who were evaluated under the original scheme.

Order of topics to be covered:

The following is a list of the topics that will be covered in this course. Although no dates are indicated below, we will progress through the topics in the order listed. Exam dates have already been scheduled (see Exam and other important dates section).

Please note the following:

1. **Topic # ≠ Chapter #.** Throughout the course I will often refer to the topic number as indicated below.
2. The topics outlined below are not of equal time duration (e.g., We will spend more class time on Topic 5 than Topics 1 and 2 combined)

Topic	Assigned readings*
1. History & Foundations	Chapter 1 [Shimamura, 2010; Satel & Lelienfeld, 2013]
2. Common Methods used to study Cognition	E-Chapter Supplement: <u>Research in Cognition: Investigating Mind and Brain*</u> [Stanovich, 2010a; Stanovich 2010b]
3. Perception	Chapter 2: pp. 45-61 (stop @ Perception and Action); [Pavani et al., 2000] Chapter 5: pp. 186-90 (stop @ Individual Differences); Chapter 2: pp. 68-81
4. Attention	Chapter 3: pp. 83-86; 98 (start @ Attentional Blink)-109; 116 (start @ Automatic Processing)-127. Chapter 4: pp. 129-151 (stop @ A Unitary View of Mem.); 159 (start @ Mind Wandering)-161 (stop @ Ironic Processes...); 164 (start @ Improving Executive Function)-170 [Colom et al., 2003; Shipstead et al., 2010]
5. Memory Processes & Knowledge Representation	Chapter 6 and Chapter 7 (Chapter 8 is optional) [Roediger & Karpicke, 2006; Roediger & Marsh, 2005; Pylyshyn, 2003]
6. Reasoning, Judgment & Decision Making	Chapter 11; Chapter 12: pp. 510 (start @ Algorithms)-511. [De Neys, 2006; Evans, 2005]

* The topic 2 E-Chapter is available on blackboard

Important: Your continuation in this course indicates your acceptance of the above schedule and procedures. The above schedule and procedures, however, are subject to some modification in the event of extenuating circumstances.

Some Important Dates:

Last day to receive 100% refund:	May 11
Quiz 1	May 15
Last day to receive 75% refund:	May 18
Quiz 2	May 22
Midterm Exam	May 29
Quiz 3	June 7
Drop Deadline--Grade "W":	June 8
Quiz 4	June 14
Final Exam	June 19 (8:30 am)

Course Grade Schedule:

	B+ 88-89 points	C+ 78-79 points	D+ 68-69 points
A 92-100 points	B 82-87 points	C 72-77 points	D 60-67 points
A- 90-91 points	B- 80-81 points	C- 70-71 points	F Below 60 points

For purposes of letter grade submission, numerical scores are rounded up from the **second decimal place value** to the nearest whole number (i.e., xx.45 and greater). For example, 81.45, (a **B-**) would be rounded up to an 82 (a straight **B**). An 81.44, however would remain a B- (the border needs to be placed somewhere).

Course schedule at a glance

Week No.	Tuesday	Thursday
1	May 8	May 10
2	May 15 Quiz 1	May 17
3	May 22 Quiz 2	May 24
4	May 29 Midterm Exam	May 31
5	June 5	June 7 Quiz 3
6	June 12	June 14 Quiz 4
7	June 19 Final Exam 8:30am	