Cognitive Science 101B: Learning, Memory, and Attention

SPRING, 2019

Lecture: Monday, Wednesday, Friday
2– 2:50 in Warren Lecture Hall 2001

TEACHING TEAM

Name	*Role*	*Office Location*	*OH Time*	*Contact Information*
Drew E. Walker, PhD	Instructor	CSB 245	Wed 3-5pm	cogs101b.ucsd@gmail.com
Michael Allen	Teaching Assistant	CSB 229	Tuesday 11-12	mgallen@ucsd.edu
Anton Preis	Teaching Assistant	CSB 114	Friday 11-12pm	apreis@ucsd.edu
Daniel Benamou	Teaching Assistant	Audrey's Café (Front Tables)	Monday 1-2pm	dbenamou@ucsd.edu
Juan Delgado	Teaching Assistant	Price Theater	Tuesday 4-5pm	jdiazdel@ucsd.edu
Joseph Lee	Teaching Assistant	Sun God Lounge	Thursday 1-2pm	jsl067@ucsd.edu
Scott Liu	Teaching Assistant	Perks Coffee	Wednesday 5-6pm	srliu@ucsd.edu

If you have a question please email your section instructor, they will forward your email to me (Prof. Walker) if I am needed to answer the question.

DISCUSSION SECTIONS

Day/Time	*Location*	*Instructor*	*Section Code*
Monday 3-3:50pm	WLH 2205	Daniel Benamou	A02
Friday 9-9:50am	MANDE B-150	Michael Allen	A01
Friday 10-10:50am	MANDE B-150	Joseph Lee	A03
Friday 12-12:50pm	PETER 102	Juan Diaz-Delgado	A04
Friday 1-1:50pm	PETER 102	Anton Preis	A05

Course material will be posted on TritonEd: http://tritoned.ucsd.edu/ (There will be a link to COGS 101B in your course list if enrolled)
Use your UCSD email username and password to sign into TritonEd. You can find instructions here: https://students.ucsd.edu/my-tritonlink/tools/tool-help/about-ted.html

Discussions and Questions should be posted on Piazza: https://piazza.com/ucsd/spring2019/cogs101b/home
All students have been added to the course on Piazza

About this Class

In this class we will survey the major topics in the experimental study of learning, memory, and attention and ask: how does our mind obtain, process, store, and retrieve information? Critically, we will approach this question by asking "what evidence do we have to believe that this is the case"? By the end of this class you should be able to (1) explain key concepts, phenomena, theories and debates in cognitive psychology, and (2) have practice critically examining the current state of our knowledge in two ways: (a) empirically: what are key studies and their results? (b)conceptually/theoretically: why do we think this result occurred? What do we think this tells us about how the mind works?

Learning Objectives

- define key concepts and phenomena in learning/memory/attention
- be familiar with classic experiments, understand what manipulations were done, and why the results have led us to believe what we do about how the mind works
- Be familiar with current debates in these domains and the evidence for the different viewpoints

Course Tools/Material

- *ZAPS 2.0 Online Psychology Labs.* This is mandatory and can be purchased separately from the (non-mandatory) book on the Norton website here*:* https://digital.wwnorton.com/cognition7
    - *You will need to add yourself to the class student set*
    - *CODE:* 143113

- *i>clicker 2, or i>clicker , i>clicker.* This is mandatory if you opt-in to participation (option to opt-out and have points allocated to exams)

- *Cognition: Exploring the Science of the Mind*, 6th Ed. by Reisberg (recommended, but not strictly required)

- Piazza

Clickers

We will be using i>Clickers (*i>clicker, i>clicker 2, or i>clicker +*) for this class. No other brand of clicker will work with this system. Clickers are a wonderful way for class to be more interactive, implement peer instruction (e.g. students learning from each other), as well as for you to check your understanding during lectures.

You must register your clickers on TritonEd by 4/8/2019

Attendance

Attendance in this course is important for your success, and you will receive points for participating in class. If you must miss class it is your responsibility to find out what you missed with regard to lecture notes and announcements by asking a classmate and checking TritonEd. It is possible (even probable) that the schedule will change, so it is important you stay updated. We will not recap lecture in office hours, section or via email

Slides

Lecture slides will be posted on the course website before class. You will still need to attend lecture/watch the podcast in order to understand the slides fully. You may be tested on information given in lecture that will not necessarily be included in the lecture slides (e.g. something I say that does not reference the slides)

Lecture Participation

Participation is an essential part of this class. Participation will include answering clicker questions, and sometimes might involve doing other in-class activities. I expect and look forward to your participation – it makes the course more fun for everyone! Please ask questions whenever something is not clear! If you are confused I promise you are not the only one, and it is helpful to everyone if you ask for clarification! You will get credit for responding to questions asked in using clickers each lecture, as well as participating in other potential in class activities.

Each class you attend and participate in starting **week 2 (4/18)** earns you **1/3%,** totaling **up to 6%** for the quarter. There are 24 participation lectures in all (starting week 2, excluding exam days) and you need to attend and participate in 18 to earn the 6% (18 x 1/3% = 6%). **This means you can miss, without missing any points, 6 classes for whatever reason.** The purpose for making only a proportion of classes mandatory for full credit is to give you an ample cushion to miss class due to illness or emergencies, and I therefore will not excuse you from participation even if you are ill or have a documented emergency.

For each class, you need to do 70% of the activities (clicker questions, or other) to be counted as being present. For example, if during a lecture there are 9 clicker questions and 1 activity, you need to do at least 7. If there are 5 questions/activities, you need to do 3 (3.5 to be exact, but in these non-integer cases we will round down). Questions/activities are not graded for accuracy but only for participation.

Section Participation

The TAs are extremely knowledgeable, patient, and approachable, and thus a wonderful resource that should be utilized if you are confused about anything covered in class. Discussion sections provide a great forum in which to seek detailed clarification on material presented in class, textbook, or readings. Each section you attend and participate in starting the **week 2 (monday 4/8)** earns you **1/2%,** totaling **up to 3%** for the quarter. There are 9 weeks of section in all (starting with the second week) and you need to attend and participate in 6 to earn the 3% (6 x 1/2% = 3%). **This means you can miss, without missing any points, 3 section for whatever reason.** The purpose for making only a proportion of sections mandatory for full credit is to give you an ample cushion to miss section due to illness or emergencies, and I therefore will not excuse you from participation even if you are ill or have a documented emergency.

Opting-out of Lecture or Section Participation

Although it is not recommended, **you may opt-out of either or both of the participation components** of the course. If you choose this option this portion of the possible points will be distributed evenly among your midterms and final exam (e.g. if you opt-out of both this 6% + 3% = 9% will be distributed evenly among your three exams, so they would each count for 3% more when I do the final grade calcualtions). You must inform your section instructor via email by **Monday of week 2 (4/8)** if you choose this option.

Online (ZAPS) Experiments

To develop a deeper understanding of some of the experimental procedures we will discuss in class, you will complete several classic experiments online throughout the quarter. These experiments will be run through a system called ZAPS (purchased through the Norton textbook, see link above). You will participate in online experiments outside of class using the ZAPS software. These assignments are due once a week **at midnight on**

Wednesdays (see schedule). These experiments are short: they each take less than 30 minutes (most considerably less, more like 5-10 minutes). You must finish them before the deadline—late completion will receive no credit. ZAP labs are worth 8% of your final grade. You can miss one lab and still receive full credit. If you have any issues with ZAPS please contact your section instructor.

Grade Breakdown

Section Participation----------3% (must go to 6 for full credit; there is an opt-out option)
Class Participation----------6% (can miss up to 5 days without penalty; there is an opt-out option)
Zaps Online Labs----------8% (one dropped)
Midterm 1----------25%
Midterm 2----------25%
Final----------33%
SONA EC----------1%

A+ 98-100%	**B+** 87-89%	**C+** 77-79%	**D** 60 -69%
A 93-97%	**B** 83-86%	**C** 73-76%	**F** Below 60%
A- 90-92%	**B-** 80-82%	**C-** 70-72%	

Exams

There will be two in-class midterms during the quarter and one cumulative final exam. Exams will be based on lecture, the online experiments, and non-textbook reading. The midterms will focus primarily on material since the previous exam, and the final will be cumulative, with a focus on the material in the last third of the course. I will not test you on text book material that was not covered in lecture.

A note of caution: Exams in this class will require you to have thought about the content deeply. Do not try to study everything the night before because this will not give you enough time to really think about the material.

What do I really *need* to read?

The textbook readings are encouraged to bolster your understanding of lecture, but are not technically required. Anything that is in the text that you need to know will also be covered in class. However, some reading is required. Each week there will be 0-2 popular science or journal articles posted online, which will be relevant to the upcoming week's lecture, and will be tested on the exam (about 1 questions from each reading) even if we don't end up discussing them in class. So, yes, you could pass the exam without doing these readings, but not ace it. I will also post some entirely optional readings, and a couple EC questions from these will appear on the exam.

Makeup Policy

If you miss an exam, class, online experiment, or quiz, you cannot make it up later. This policy is strictly enforced. We unfortunately do not have the bandwidth to make exceptions. Under special circumstances (e.g. you have a doctor's note for a serious ailment), we will work with you. If you miss an exam and we allow you to make it up, it will be an essay exam instead of multiple choice. Additionally, if you cannot make the final exam time (see schedule), you should not take this class; final exams cannot be given at another time.

SONA (research participation)

Spend 1 hour being a research participant in an experiment here at UCSD. To sign up visit:

https://ucsd.sona-systems.com

You must assign your credit to this class before the final exam. No changes can be made after the final.

If you do not wish to participate as a research subject you may contact me and ask me for alternative options.

Academic Integrity

Please don't cheat. Cheating undermines the success of every other student who has worked hard and honestly for their knowledge/grade. I therefore take academic dishonesty very seriously and all instances will be reported to the UCSD Academic Integrity Office. Some examples of academic dishonesty include, but are not limited to, copying from another student, unauthorized use of cheat-sheets, or asking another student to respond to clicker questions for you (or vice versa). It is your responsibility to familiarize yourself with UCSD academic integrity policies.

http://academicintegrity.ucsd.edu/

Schedule

This is my best approximation, and it is likely to change a bit
Check online for mandatory readings posted online each week

Week	Dates	Topic	Reading and Assignments
Week 1	*4/1 – 4/5*	*Introductions, syllabus and class organization* *Overview, history, modern approaches to studying the mind*	*Syllabus* *Reisberg Chapter 1*
Week 2	*4/8-4/12*	*Implicit learning: classical and operant conditioning* **Deadlines 4/8:** Register clicker **4/12** clicker opt-out, section opt-out**,** SONA alternative request	*Medin Chapter 2 (pdf)* *ZAPS: Face perception*
Week 3	*4/15-4/19*	*Statistical learning* *observational learning* *Categorization*	*Reisberg Chapter 3,4* *ZAPS: Visual search* *ZAPS: Stroop effect*
Week 4	*4/22 – 4/26*	**Midterm 1 Monday (4/22)** *Attention*	*Reisberg Chapter 5* *ZAPS: Attentional blink*
Week 5	*4/29-5/3*	*Attention*	*ZAPS: Serial Position Effect* *ZAPS: Implicit-association*
Week 6	*5/6 – 5/10*	*What is memory?* *Short-term, working memory*	*Reisberg Chapter 6* *ZAPS: Signal detection (5/15)*
Week 7	*5/13-5/17*	*(Explicit) learning* *Episodic, semantic memory*	*Reisberg Chapter 7,8* *ZAPS: Memory Bias*
Week 8	*5/20-5/24*	**Midterm 2 Monday (5/20)** *Retrieval and Forgetting*	*Reisberg Chapter 7,8* *ZAPS: False Memories (5/22)*
Week 9	*5/27-5/31*	**Memorial Day (5/27)** *Autobiographical memory* *False memory*	*Reisberg Chapter 7,8* *ZAPS: Sentence Verification*
Week 10	*6/3 – 6/7*	*Concepts and Categories*	*Reisberg Chapter 10*

Final Exam: Friday 6/14, 3-6pm
Location TBD