

Cognition

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Summer 2019

Tuesdays & Thursdays 6PM – 10PM

SEC-217, Busch Campus

<https://dcs.rutgers.edu/classrooms/science-engineering-resource-center-room-217>

Instructor: Nicholas Beacher

Email: njb110@psych.rutgers.edu

Office hours: By arrangement, Psychology Building

Course Description:

This course offers an introduction to Cognition and Cognitive Psychology. These Cognitive processes include; thinking, language, and memory and their development.

Specifically, we will begin with an overview of Cognitive Psychology and Neuroscience, then study specifics of cognition (Perception, Attention, & Short/Long term memory consolidation, Language). Finally, we will end with hierarchical processes involved in Problem Solving and Judgement-based decision making processes. In this course, we will cover the theories and investigative techniques used to study these concepts (and more).

Course Readings:

Textbook: Cognitive Psychology: Connecting Mind, Research, and Everyday Experience, 5th edition. E. Bruce Goldstein. (2018). Cengage Learning.

Print version or ebook are fine but the 5th edition is a MUST! You are responsible for all assigned readings prior to the lecture.

All additional updates and announcements will be made through Sakai, you are also responsible for any additional readings posted on Sakai.

Grading Policy:

Attendance/Participation:	10%
Midterm:	30%
Final Exam:	40%
Presentation:	20%
	= 100% maximum

Gradescale: These cutoffs are FINAL-no exceptions will be made

90%-100%	A
85%-89%	B+
80%-84%	B
75%-79%	C+
65%-74%	C
51%-64%	D
<50%	F

Course Policy & Requirements:

- 1) Attendance and Participation: 10%
 - a. Attending lectures is vital for success in this course. There will be certain topics, subjects, or examples I emphasize greatly during lectures that may not be evident in the text (and vice versa). Please make every effort to attend and see policy on excused absences
 - b. Missed classes: you are responsible for any and all material covered in class, I need a doctors/deans note for any excused absence.
 - c. Readings: The syllabus is very clear as to what chapters must be read prior to lecture-I expect all students to have read the assigned readings, the book does a fine job for building a base knowledge of Cognition and I recommend reading it!
- 2) Exams: 2 total (1 midterm 30% and 1 final 40%): 70%
 - a. Exam policies: no makeup exams will be given due to unexcused absences and will result in a '0' grade (DO NOT SKIP)!
 - b. A makeup exam will only be given in the case of a documented illness-such absences will require a doctor's AND dean's note in order to qualify for a makeup exam.
 - c. There will be no dropped exams, do your best!
- 3) Presentation: (20%)
 - a. a 20 minute group presentation about a topic (more information to follow)
- 4) Hand Posted signs-DO NOT TRUST ANY SIGN ON THE DOOR! Any information posted (exams postponed, cancellations, swarm of feral cats) is most likely a prank. I will directly email the class in an unforeseen cancellation or change.
- 5) Questions regarding anything said in class:
 - a. I absolutely understand that this is a lot of information in a short amount of time. If you are struggling to keep up or require some extra help definitely see me after class (I am more than happy to clarify)
 - b. Alternatively, email me to set up office hours (my lab is right next door in the Psychology building)
 - i. Please note that emailing me at 4am before a test will not result in an immediate answer-be responsible and I will be happy to help.
- 6) Hints:
 - a. Attend class: I will discuss important information and give tips on how to study for the exam!
 - b. Participate: Asking questions spurs discussion, others may have similar questions. Alternatively, see me after class or set up office hours
 - c. Study: Any hints I give during lecture are good to stick to, make sure to study the major topics from the book in depth (i.e., overall topics and bold faced words), pay attention to the chapter summaries and specific slides from the lecture
 - d. Read prior to the class: This course will go fast, do not skip readings because it is easy to fall behind

Academic Integrity:

Students must comply with the Rutgers Academic Integrity Policy:

<http://academicintegrity.rutgers.edu/>. Do not cheat during exams-it is not worth the risk. If you are struggling in the course I am happy to help.

Course Schedule (tentative): note, everything in this schedule is subject to change.

Week#	Date	Objective, Readings, Assignment
Week 1Tue	Tue, May 28	Reading: Ch 1: Intro to Cognitive Psychology Course Obj: Studying the mind, evolution of the science, physiological studies
Week 1Thr	Thr, May 30	Reading: Ch2: Cognitive Neuroscience Course Obj: Neurons, Firing Patterns, Regional Representations, What Does it Mean?
Week 2Tue	Tue, Jun 4	Reading: Ch3: Perception Course Obj: Perception basics, measuring perception, human perception, behavioral & neurophysiological basics of perception
Week 2Thr	Thr, Jun 6	Reading: Ch4: Attention Course Obj: Information Processing, Capacities, Processes, Multitasking, Distractions, Attentional Networks
Week 3Tue	Tue, Jun 11	Reading: Ch5: Short-term/Working Memory Course Obj1: Midterm! 30% (ch1,2,3,4), 4 Lectures Course Obj2: Short-term storage, WM manipulation of info, WM and the brain
Week 3Thr	Thr, Jun 13	Reading: Ch 6: Long-term Memory (Structure) Reading: Ch 7: LTM (Encoding, Retrieval, Consolidate) Course Obj: Ch6: STM v LTM, Episodic/Semantic, Procedural Memory (Priming & Conditioning) Course Obj: Ch7: Encoding, Studying, Retrieval, Consolidate, Reconsolidate
Week 4Tue	Tue, Jun 18	Reading: Ch9: Conceptual Knowledge Course Obj: Categorization of objects, Network models of representation, Concept representation in the brain
Week 4Thr	Thr, Jun 20	Reading: Ch11: Language Course Obj: What is language, understanding words/sentences/stories, conversing, music
Week 5Tue	Tue, Jun 25	Reading: Ch12: Problem Solving & Creativity Reading: Ch 13: Judgements, Decisions, Reasoning Course Obj: ch12: Problem?, Gestalt, Info-processing, Analogies, Creative Problem Solving Course Obj: ch13: Observational Judgements, Deductive Reasoning, Make a choice, Dual Systems Approach
Week 5Thr	Thr, Jun 27	Presentation! 20% , Mini review session
Week 6Tue	Tue, Jul 2	Final Exam! 40% (ch 5, 6, 7, 9, 11, 12 , 13), 5 Lectures