

## Syllabus for Cognition

01:830:305

### Logistics

- Lecture: T/TH 3.20–4.40PM, LSH-A143  
<http://maps.rutgers.edu/building.aspx?NUM=4153>
- Professor: MARY RIGDON
  - Email: [mrigdon@rci.rutgers.edu](mailto:mrigdon@rci.rutgers.edu)
  - Office: A103 Psychology Building Annex, Busch Campus
  - Office Hours: THURS. 11-1PM OR BY APPT.
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### Course Description

The pre-requisite is having successfully completed 01:830:101 (General Psychology). This course counts for 3 credits.

#### Objectives of the course

1. Students will develop an understanding of the historical and philosophical antecedents of contemporary cognitive psychology
2. Students will be able to describe theories of mental representations, operations, and processes

3. Students will be able to characterize major relationships between brain structures and cognitive processes.
4. Students will acquire practical knowledge concerning the development and retention of academic knowledge and of skill and expertise in various domains.

## Textbook

Cognitive Psychology: Applying the Science of the Mind by B. Robinson-Riegler & G. Robinson-Riegler, 3rd edition, Pearson. 2012. (ISBN: 978-020517674-8)

Available as eTextbook for 180 days (\$62.50):

[http://www.coursesmart.com/9780205050079?\\_\\_professorview=false](http://www.coursesmart.com/9780205050079?__professorview=false)

## Other Required Materials

- MyPsychLab: (<http://www.mypsychlab.com>)

This resource will become available September 1. You must register: click on Register as a Student, then yes, I have a CourseID. Enter the Course ID below and click Go.

Course ID: rigdon96568

Course Name: Cognition

- iClicker1 is available for purchase from the bookstore. These will be used in class to record answers to questions posed during lecture.
- Articles: There will be articles posted on Sakai that will be part of your required reading. See below for a schedule of the readings. The reading is subject to change.

## Evaluation

- Reaction Comments (10%): There are 12 of these assignments during the semester. For almost every topic, we will have one class that features a "Focus". You will hand in reaction comments to the readings that are

due on that day. The reaction comments should discuss your reaction to the reading as well as any questions you have after the reading. One paragraph should suffice though it can be longer. You may be called on to share your reaction comments with the class. No late reaction comments will be accepted. You can miss two reaction comments without it affecting your grade. These must be legible, not torn out of a notebook, and if multiple pages, then stapled.

- In-class iClicker Quizzes (5%): At intervals during most lectures, opinion or factual questions will be presented for you to answer with an iClicker response. You receive partial credit for incorrect responses. I compute a score for every in-class quiz; your average score on the in-class quizzes is worth as much as an exam. Questions, answers, and your responses are posted for every in-class quiz. It is your responsibility to check these the day after every class to ensure that your clicker is working and your responses are being recorded. Up to four missed clicker quizzes are allowed. This will accommodate forgotten clickers, clicker malfunction, and routine illness. Check your clicker results after EVERY class, even if your clicker has been working. The first clicker quiz will be two weeks from today.
- Online Experiments (5%): MyPsychLab has online experiments related to the reading in your textbook. Several experiments will be assigned throughout the semester. Load the webpage (<http://www.mypsychlab.com>), login, and then click on Experiment Tools and find the name of the experiment to be completed.
- Two Exams (30%): The first exam will be in class on Tuesday **October 11** and will cover chapters 1–4. The second exam will be in class on **November 10** and will cover chapters 5–8. They will each count equally — 15% — toward your total exam grade. No make up exams will be given. Be sure to record these dates now.
- Final Exam (50%): The final exam will be on Friday **December 16, 8am–11am**. It will be cumulative. At least half of the final exam will focus on the material not covered on the first or second exam.

NOTE: MyPsychLab has multiple choice questions for every chapter in your textbook. I recommend you use this resource to check your

comprehension after reading each chapter. You can locate them under Study Plan & Assignments. Choose the chapter, then the chapter exam will be available. It automatically records your grade. Your scores on these practice exams will not count toward your grade.

### **Rutgers Policy on Academic Integrity**

Rutgers has a very detailed policy on Academic Integrity and Code of Student Conduct: <http://academicintegrity.rutgers.edu/integrity.shtml>. Violations include cheating, fabrication, plagiarism, denying information to or misleading others, or facilitating these violations. Take a 20 minute interactive-tutorial on Plagiarism and Academic Integrity: <http://www.scc.rutgers.edu/douglass/sal/plagiarism/intro.html>.

### **Students with Disabilities**

Students with disabilities requesting accommodations must follow the procedures outlined at <http://disabilityservices.rutgers.edu/request.html>.

Date	Topic	Main Readings/Due
September 1	Logistics/Intro	read syllabus - mark important dates
6	History and Intro	TEXT, Chapter 1
8	MONDAY CLASSES MEET	NO CLASS
13	Focus: The Brain	Banich & Compton Chs 1 & 2
15	Meat Machines	Clark (2001) Ch 1 + reaction
20	Perception	TEXT, Chapter 2
22	Focus: Synthesia	Ramachandran Ch 3 + reaction
27	Focus: Illusions	Science Blog: Cognitive Daily + reaction
29	Attention	TEXT, Chapter 3
October 4	Focus: Stroop Effect & Change Blindness	Bower (1992) & O'Regan + reaction
6	Immediate Memory	TEXT, Chapter 4
11	FIRST EXAM	Chs 1-4
13	Objects & Concepts	TEXT, Chapter 5
18	Focus: Face Recognition & Prosopagnosia	Nelson (2001) + reaction
20	Long-term Memory	TEXT, Chapter 6
25	Focus: Amnesia & H.M.	Corkin (1984, 2002) + reaction
27	Autobiographical Memory	TEXT, Chapter 7
November 1	Focus: History & Evidence	Tulving (2002) + reaction
3	Malleability	TEXT, Chapter 8
8	Focus: False Memories	Loftus (2003) + reaction
10	SECOND EXAM	Chs 5-8
15	Language	TEXT, Chapter 9
17	Focus: Word and Rules	Pinker TBA + reaction
22	Focus: Power of Babble	Ramachandran Ch 6 + reaction
24	THANKSGIVING	NO CLASS
29	Animal Cognition	Shettleworth Chs 1 & 2
December 1	Judgments & Decisions	TEXT, Chapter 11
6	Judgments	Plous (1993) Chs 10 & 11 + reaction
8	Decisions	Plous (1993) Chs 7-9 + reaction
13	Review for Final	
16	FINAL EXAM	8am-11am

## Bibliography

- [1] Banich, M.T. and R.J. Compton (2011). Cognitive Neuroscience, 3rd edition, Wadsworth.
- [2] Bower, B. Brother Stroop's Enduring Effect: A Mental Task Devised Nearly 60 Years Ago Still Intrigues Psychologists. *Science News* 141(9), 312–316.
- [3] The Britannica guide to the brain. London: Encyclopedia Britannica. 2008.
- [4] Clark, A. (1994). Mindware: An Introduction to the Philosophy of Cognitive Science. New York, NY: OUP.
- [5] Corkin, S. (2002). What's new with the amnesic patient H.M.? *Nature Reviews* 3, 153–160.
- [6] Corkin, S. (1984). Lasting consequences of bilateral medial temporal lobectomy: Clinical course and experimental findings in H.M. *Seminars in Neurology* 4(4), 249–259. doi:10.1055/s-2008-1041556
- [7] Loftus, E. (2003). Make-Believe Memories. *American Psychologist* 58(11), 864–873.
- [8] Nelson, C. A. (2001). The Development and Neural Bases of Face Recognition. *Infant and Child Development* 10, 3–18.
- [9] O'Regan, J. Kevin (2010) Change blindness. *Encyclopedia of Cognitive Science*.  
download here: <http://nivea.psychu.univ-paris5.fr/ECS/ECS-CB.html>
- [10] Pinker, S. (1999). How the Mind Works. New York, NY: Norton.  
url: <http://pinker.wjh.harvard.edu/books/htmw>
- [11] Pinker, S.(1999). Words and Rules: The Ingredients of Language. New York, NY: Basic Books.  
url: <http://pinker.wjh.harvard.edu/books/wr/index.html>
- [12] Plous, S. (1993). The Psychology of Judgment and Decision Making. New York, NY: McGraw Hill.

- [13] Ramachandran, V.S. (2011). The Tell-Tale Brain. New York, NY: W.W. Norton.
- [14] Science Blog: Cognitive Daily, Some insight into how the hollow-face illusion works, July 2009.  
[http://scienceblogs.com/cognitivedaily/2009/07/some\\_insight\\_into\\_how\\_the\\_holl.php](http://scienceblogs.com/cognitivedaily/2009/07/some_insight_into_how_the_holl.php)
- [15] Shettleworth, S.J. (2010). Cognition, Evolution, and Behavior. Oxford: OUP.
- [16] Tulving, E. (2002). Episodic memory: From Mind to Brain. *Annual Review of Psychology* 53, 1–25.

Recommended additional readings

- Predictably Irrational, by Dan Ariely, 2010, Harper Collins.  
(<http://danariely.com>)
- The Ethical Brain: The Science of Our Moral Dilemmas, by Michael S. Gazzaniga, 2005, Harper Collins.
- This is Your Brain on Music, by Daniel Levitin, 2006, Dutton.
- Memory Observed, by Ulric Neisser and Ira Hyman, 2004, Second Edition, Worth Publishers.
- Computation and cognition. Cambridge, by Zenon Pylyshyn, 1984, Cambridge MA: MIT Press.
- Phantoms in the Brain: Probing the Mysteries of the Mind, by V.S. Ramachandran and S. Blakeslee, 1998, Harper Collins.
- The Man who Mistook his Wife for a Hat (and other clinical tales), by Oliver Sacks, 1985, Simon & Schuster.
- Nudge: Improving Decisions About Health, Wealth, and Happiness, by Richard Thaler and Cass Sunstein, 2008, Yale University Press.
- Good Natured: The Origins of Right and Wrong in Humans and Other Animals, by Frans deWaal, 1996, Cambridge: Harvard University Press.