Psychology 260: Cognitive Neuroscience **Fall 2019**

Prof. Rebecca Compton
rcompton@haverford.edu
Sharpless 428
Office hours: sign up on Google spreadsheet

Course Description:

Examines the neural basis of higher mental functions, including brain systems supporting vision, object recognition, attention, memory, spatial functions, language, emotion and decision-making. Major themes include mind/brain relationships, localization of function, and plasticity of the brain. Material will include studies of people with focal brain damage as well as neuroimaging studies of neurologically normal people. Cognitive neuroscience approaches to clinical conditions will also be explored. Prerequisite: one semester of introductory psychology.

Course Requirements:

100 pts Exam I— self-scheduled between 10/10 and 10/12
100 pts Exam II – self-scheduled between 12/5 and 12/9
100 pts Paper – due by end of exam period (noon on 12/20)
30 pts Responses to journal articles—due by 5pm the day before article discussions
20 pts Attendance/participation
TOTAL: 350 points

Main Text:

Banich, M.T. & Compton, R.J. (2018). *Cognitive Neuroscience, 4th Ed*. Cambridge Univ Press.

- Available for purchase and on reserve at Science Library.
- Several loaners are available free of charge from professor in cases of financial need.
- Additional readings available on Moodle.

General Guidelines and Expectations:

- Haverford College is committed to supporting the learning process for all students. Please contact the professor as soon as possible if you are having difficulties in the course. There are also many resources available on campus, including the Office of Academic Resources (https://www.haverford.edu/oar/).

- Slides shown in class will generally be posted within 24 hours after the class period in which they are shown. Slides are not available before class.

- The professor aims to respond to email queries within one business day. Emails received by the professor on the weekend and in late-night hours will usually not receive attention until sometime in the next business day. Please plan accordingly.

- Students are responsible for attending class. Students who miss class due to illness or emergency should inform the professor, get notes from another student, and then meet with the professor if the student has any specific questions.

- Deadlines are generally non-negotiable except in cases of medical emergency, personal catastrophe, or undue hardship. Please communicate with the professor as soon as possible if any of these situations affects your ability to meet deadlines.

- Cell phones should be on vibrate during class and should be viewed only in the case of emergencies during class.

- Laptops can be a source of distraction for you and your fellow students. You may use a laptop to take notes, but if you choose to do so, please email the professor to let her know that is your preferred method of note-taking. Using laptops during class for non-class activities (e.g., shopping, social media, emailing, doing reading for other classes) is disrespectful to the professor and fellow students and is not permitted.

Accommodations and Inclusion Statement:

- Haverford College is committed to providing equal access to students with a disability. If you have (or think you have) a learning difference or disability – including mental health, medical, or physical impairment – please contact the Office of Access and Disability Services (ADS) at hc-ads@haverford.edu. The Coordinator will confidentially discuss the process to establish reasonable accommodations.

- Students who have already been approved to receive academic accommodations and want to use their accommodations in this course should share their verification letter with the professor and also make arrangements to meet with the professor as soon as possible to discuss their specific accommodations. Please note that accommodations are not retroactive and require advance notice to implement.

- It is a state law in Pennsylvania that individuals must be given advance notice if they are to be recorded. Therefore, any student who has a disability-related need to audio record this class must first be approved for this accommodation from the Coordinator of Access and Disability Services and then must speak with the professor. Other class members will need to be aware that this class may be recorded.

Course Schedule

Date	Topic	Assignment
Sept. 3	Introduction to course	
Sept. 5	Methods & anatomy	B&C skim Ch. 1, 2, 3
Sept. 10	Vision: From retina to cortex	B&C Ch. 5, pp. 136-155
Sept. 12	Vision: Color perception	Snowden
Sept. 17	Vision: Object recognition	B&C Ch. 6, pp. 167-185
Sept. 19	Vision: Face recognition	B&C Ch. 6, pp. 185-193
Sept. 24	***Journal Article Discussion #1***	Arcaro article; ***Responses due by 5pm on 9/23***
Sept. 26	*No class (professor at conference)*	
Oct. 1	Spatial cognition	B&C Ch. 7
Oct. 3	Auditory & multimodal perception	B&C Ch. 5 pp. 155-164; B&C Ch. 6, pp. 193-196
Oct. 8	Plasticity in sensory systems	(no reading)
Oct. 10	***Exam I self-scheduled Oct 10-12*** *Oct. 10 class replaced by office hours*	

SPRING BREAK

Oct. 22	Memory	B&C Ch. 9; Ogden Ch. 3
Oct. 24	Memory – guest speaker	(reading TBA)
Oct. 29	***Journal Article Discussion #2***	Hassabis article; ***Responses due by 5pm on 10/28***
Oct. 31	Motor control & laterality	B&C Ch. 4; Ogden Ch. 18
Nov. 5	Language: Spoken	B&C Ch. 8, pp. 223-242; Ogden Ch 5
Nov. 7	Language: Written	B&C Ch. 8, pp. 242-253
Nov. 12	Attention	B&C Ch. 10
Nov. 14	Executive functions	B&C Ch. 11
Nov. 19	Emotion	B&C Ch. 12
Nov. 21	***Journal Article Discussion #3***	Tost article; ***Responses due by 5pm on 11/20***
Nov. 26	Social Cognition	B&C Ch. 13
Nov. 28	*No class - Thanksgiving*	
Dec. 3	Catch-up and exam review	
Dec. 5	***Exam II self-scheduled Dec 5-9*** *Dec. 5 class replaced by office hours*	
Dec. 10	Psychopathology	B&C Ch. 14
Dec. 12	Cognitive neuroscience and society	B&C Ch. 17

Final paper due by end of exam period