Sensation & Perception

01:830:301:H4:04798

Summer 2019

Tuesdays & Thursdays 1PM – 5PM SEC-211, Busch Campus

<u>Instructor:</u> Angela Dao

Email: angela.dao@rutgers.edu

Office hours: By arrangement, Psychology Building

Course Description:

Sensation & Perception is the area of psychology that studies how humans and other animals convert information from the outside world into information that brains can use and convert it into information we (or the animal) can use to navigate the outside world. As such, it is central to almost all aspects of behavior and cognition. In this class, we will be examining this process from a broader, information-theoretic based angle to gain a greater understanding of these underlying processes.

Learning Goals

- 1. Understand how sensory organs interact with the nervous system to create a picture of the world
- 2. Learn how psychophysical and biological methods are used to scientifically measure perception
- 3. Identify how connections are made between the brain and the environment

Course Readings:

Sensation and Perception, 5th edition. Wolfe JM, Kluender KR, Levi DM et al. Previous versions *may* be acceptable, but you are responsible for all the information in the 5th edition. Assigned chapters are posted for the 5th edition and it is your responsibility to ensure you are reading the proper chapters if using an older edition.

Grading Policy:

Attendance/Participation:	10%
Midterm:	35%
Final Exam:	35%
Presentation:	20%

Total: = 100% maximum

Gradescale:

90%-100%	A
85%-89.9%	B+
80%-84.9%	В
75%-79.9%	C+

65%-74.9%	C
51%-64.9%	D
< 50%	F

Course Policy & Requirements:

- 1) Attendance and Participation: 10%
 - a. Attending lectures is your most important resource for succeeding in this course. There will be in class discussions, demonstrations, and topics covered that may not be adequately explained or mentioned in the text that you will be responsible for knowing for the exams
 - b. Missed classes: you are responsible for any and all material covered in class. *Every unexcused absence will result in 1 point off your final grade*. Undue latenesses and insufficient participation will also reflect poorly on your overall grade.
 - c. Computers are allowed in class for note taking, but cell phone use is not. Excessive cell phone use will reflect poorly on your participation grade.
 - d. Assigned readings for each class will be posted it is expected that you are all familiar with the course material assigned for the day and you will come to class prepared with any questions you may have.
- 2) Exams: 2 total (both worth 35%) 70%
 - a. Unexcused absences on exam days will result in a '0' grade for that exam and no makeup will be given. Any rescheduled or makeup exams must be scheduled *prior* to exam day.
 - i A makeup exam will only be given in the case of a documented illnesssuch absences will require a doctor's AND dean's note in order to qualify for a makeup exam.
- 3) Presentation: (20%)
 - a. a 20 minute group presentation about a topic (more information to follow)
- 4) Any information regarding changes in class times, locations, etc will always be sent out via sakai announcements

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:

Week#	Date	Objective, Readings, Assignment
Week 1Tue	Tue, Jul 9	Reading: Ch1, Ch 2 Course Obj: Intro to S&P, Psychophysics and biology of perception, Light physics, information processing
Week 1Thr	Thr, Jul 11	Reading: Ch3, 4 Course Obj: Spatial vision, light optics, the striate cortex, perceiving and recognizing objects
Week 2Tue	Tue, Jul 16	Reading: Ch5, 6 Course Obj: Color perception, space perception and binocular vision, depth perception
Week 2Thr	Thr, Jul 18	Reading: Ch7, 8 Course Obj: visual attention and scene perception, disorders of attention, motion perception, eye movements
Week 3Tue	Tue, Jul 23	Midterm! 35% (ch1-8)
Week 3Thr	Thr, Jul 25	Reading: Ch9, Ch10 Course Obj: hearing physiology, psychoacoustics, structure of auditory system, sound localization
Week 4Tue	Tue, Jul 30	Reading: Ch12, 13 Course obj: vestibular sensation, spatial orientation perception, touch physiology, haptic perception
Week 4Thr	Thr, Aug 1	Reading: Ch14 Course Obj: olfaction physiology, neurophysiology of olfaction, olfactory psychophysics
Week 5Tue	Tue, Aug 6	Reading: Ch15 Course Obj: anatomy and physiology of gustatory system, taste vs. flavor, taste contribution to regulation of nutrients
Week 5Thr	Thr, Aug 8	Presentation! 20%,
Week 6Tue	Tue, Aug 13	Final Exam! 35% (ch 9, 10, 12-15)

^{***}Syllabus and course schedule subject to change**