SENSATION & PERCEPTION

Course Outline Fall Semester, 2021

PSYC4120 Dr. James M. Brown

MWF 10:20-11:10am (17141)

MWF 12:40-1:30pm (38400)

Off Hrs: M 2:00-3:00pm, or by apt.

Office: Psy 502

Phone: 542-8045

jmbrown@uga.edu

Course Objectives:

By the end of this course students should:

- Have gained a general understanding and appreciation of their sensory/perceptual systems.
- Have an understanding of the general anatomy, processes, and functions of the different sensory/perceptual systems.
- Be able to engage in meaningful discussions of current approaches to sensation and perception.
- Understand the role of theories and models in the study of sensation and perception.
- Understand how models are used to generate new psychological knowledge.
- Understand how experimental data relate to theories and models of sensory/perceptual processes.

Email: Please direct all course-related email through eLC email only.

Text: Sensation & Perception (10th edition), E. B. Goldstein & J. R. Brockmole

Supplemental Reading (SR): The Experiment of Hecht, Schlaer, and Pirenne. from Visual Perception (Chapter 2, pp. 6-26), T.N. Cornsweet, 1970. Password (**helmholtz**) required for the two files, experiment1.pdf & experiment2.pdf.

Additional Readings: Gilchrist's 2-Room Experiment, Blake & Sekuler, Ch. 5 (pp. 151-180), <u>Tutorial on Spatial Frequency Analysis</u>, <u>Landy Perception Lecture Notes on SF</u>, Blake & Sekuler, Ch. 6 (pp. 193-201)

Grading Policy: Your final grade is determined from a combination of: (1) five Tests (50%) using your four (4) best scores, (2) Final Exam (30%), (3), Written Assignments (15%) (see below and eLC Syllabus for more details on Assignments including due dates) and, (4) Attendance (5%).

Exempting Final Exam: Students with a 'B' average (80%) or better over all 5 tests may exempt out of the Final Exam and substitute their 5 test average for their Final Exam grade. See file "Exempting the Final Exam" on ELC site for details of procedure and requirements for exempting final exam.

Written Assignments: See below and the assignments themselves for due dates. All assignments are due by 8:00am on the due date. Late Assignments will not receive credit unless due to illness. If due to illness you must provide an authorized doctor's excuse. You will send all written assignments through eLC email either in the textbox or as an attachment. When sending an attachment, please always follow the *Instructions for Emailing Assignments* and acceptable attachment file formats. When you send an attached assignment, I will return it with feedback. Please be sure "Track Changes" is ON if you send as a Word document e.g., .doc or .docx so you see all comments.

Attendance Policy: Your first four (4) unexcused absences (i.e., those without an authorized doctor's excuse, and not including the drop period through 8/24/21) carry no penalty. Your fifth unexcused absence results in 3% for attendance. Your sixth unexcused absence results in 0% for attendance.

Electronic Devices Policy During Class: The use of laptop computers or handheld electronic devices during class time is not allowed. All handheld devices are to be silenced (i.e., no ringing or vibrating, etc.) and not used during class. A violation includes the instructor hearing, or seeing you use, your device during lecture. <u>Each violation of the Electronic Devices Policy will result in a 1 point reduction in the final grade for the course</u>. For example, your final grade calculates out to be a 90 (A) but you violated the Electronic Devices Policy once resulting in a final grade of 89 (A-).

Testing Policy: Tests and the Final Exam are multiple-choice tests based on information covered in lectures, the Textbook, the Supplemental Reading, and the Additional Readings.

• All tests will be taken online (including Final Exam) using the *Respondus LockDown Browser and Respondus Monitor* therefore <u>Tests will not be open book</u>. You will take a practice test before Test 1 to insure you have the latest version of *LockDown Browser* and *Monitor* installed and understand the procedures required for taking a test using *Monitor* system. (See https://help.elc.uga.edu/students/respondus_monitor/

for additional information.)

- Your computer must have a webcam with microphone to take Tests. Students are strongly encouraged to purchase one in advance. (They are relatively inexpensive (</= \$20) e.g., https://www.amazon.com/s?k=webcam+with+microphone&rh=n%3A172282%2Cp_36%3A12535 https://www.amazon.com/s?k=webcam+with+microphone&rh=n%3A172282%2Cp_36%3A12535 https://www.amazon.com/s?k=webcam+with+microphone&rh=n%3A172282%2Cp_36%3A12535 https://www.amazon.com/s?k=webcam+with+microphone&rh=n%3A172282%2Cp_36%3A12535 https://www.amazon.com/s?k=webcam+with+microphone&rh=n%3A172282%2Cp_36%3A12535 <a href="https://www.amazon.com/s.
- Webcam loan policy. See Tomeka Walker in the Main Office (228) of the Psychology building to borrow a webcam. There will be a \$10 deposit you will get back when you return the webcam. Please return webcam as soon as possible after our Final Exam (or sooner if you are eligible and choose to exempt the Final Exam). If the webcam is not returned by December 17, 2021 you will receive an "Incomplete" for the course until it is returned.
- Test questions will come from the textbook's Testbanks and from my personal Testbank made over the years.
- Test questions will tend to be of an integrative or conceptual nature (e.g., I may ask one question that tells me if you know the anatomy of the eye). Few questions as possible will be factoid questions (e.g., The part of the eye we refer to as someone's eye color is called the _____?).
- Tests will consist of 40 multiple-choice questions.
- Test duration is 50 minutes from the time you start with a timer visible.
- You must submit test within 10 minutes after test duration is up or it will not be accepted (i.e., '0' for test), no exceptions.
- All Tests will be available to take from 8am to 11:30pm on scheduled days so you can take when most convenient for you and you will not have to come to class that day.
- No make-up Tests or Final Exam allowed without an authorized doctor's excuse.
- If you have a technical problem during a Test or the Final Exam contact Dr. Brown at jmbrown@uga.edu immediately.
- All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Date	<u>Topics</u>	Readings
WEEK #1		
8/18-8/20	Introduction (Module 1)	Ch. 1, Ch. 4 (pp. 88-89)
WEEK#2		
8/23-8/25	Psychophysics & Signal Detection Theory (Module 2)	Ch. 1 (pp. 13-15): Appendices A-D
8/24	Drop/Add Deadline	Cin 1 (pp.13-16), 1.ppendices 11 2
8/27	Neurophysiology & Perception (Module 3)	Ch. 2 (pp.33-39); Ch. 4 (p. 75); Ch. 3 (pp. 62-
		67)
WEEK #3		
8/30	Neurophysiology & Perception (Module 3) cont.	
9/1-9/3	Eye, Retina, & Retinal Function (Module 4)	Ch. 2 (pp. 21-33; 39-45); SR

WEEK #4	NO CT LCC T LDOD D LTUTO TD LT	
9/6	NO CLASS: LABOR DAY HOLIDAY	
9/8	Test 1 (Modules 1-4)	Cl. 2 (m. 40.59)
9/10	Receptive Fields & Lateral Antagonism (Module 5)	Ch. 3 (pp. 49-58)

WEEK #5

9/13 Receptive Fields & Lateral Antagonism (Module 5), cont.

9/15-9/17 Lightness, Brightness, & Contrast Perception (Module 6) Ch. 9 (pp. 217-219)

WEEK #6

9/20 Lightness, Brightness, & Contrast Perception, cont.

9/22-9/24 Visual Pathways, Cortex, & Streams (Module 7) Ch. 3 (58-62); Ch. 4

WEEK #7

9/27-9/29 Spatial Frequency Representation (Module 8) Blake & Sekuler, Ch. 5 (pp. 151-180); <u>Tutorial</u>

on Spatial Frequency Analysis and Landy

Perception Lecture Notes on SF

10/1 Test 2 (Modules 5-8)

WEEK #8

10/4-10/8 Perceptual Organization, Objects & Scenes (Module 9) Ch. 5; Blake & Sekuler, Ch. 6 (pp. 193-201)

WEEK #9

10/11 Semester Midpoint

10/11-10/13 Attention (Module 10) Ch. 6 10/15 Color Perception (Module 11) Ch. 9

WEEK #10

10/18 Color Perception (Module 11), cont.

10/20-10/22 Depth & Size Perception (Module 12) Ch. 10

WEEK #11

10/25 Test 3 (Modules 9-12)

10/25 Semester Withdrawal Deadline

10/27 Perceiving Motion (Module 13) Ch. 8; Ch. 7 (pp. 149-155, 166-167)

10/29 NO CLASS: FALL BREAK

WEEK #12

11/1 Perceiving Motion (Module 13), cont.

11/3-1/5 Hearing & Localization (Module 14) Ch. 11; Ch. 12 (pp. 289-298)

WEEK #13

11/8-11/10 Hearing & Localization, cont.

11/12 Speech Perception (Module 15) Ch. 13

WEEK #14

11/15 Speech Perception (Module 15), cont.

11/17 Test 4 (Modules 13-15)

11/19 Touch & Pain (Module 16) Ch. 14

WEEK #15

11/22 Touch & Pain (Module 16), cont.

11/24-11/26 NO CLASS: THANKSGIVING HOLIDAY

WEEK #16

11/29 Touch & Pain, cont.

12/1-12/3 Smell & Taste (Module 17) Ch. 15

WEEK #17

12/6 Test 5 (Modules 16-17)

12/7 **Last Day of Classes**, Friday Schedule

FINAL EXAM

10:20-11:10am: Friday, 12/10, 8:00-11:00am 12:40-1:30pm: Monday, 12/13, 12:00-3:00pm

Plus/Minus Grading Policy

Cutoff % Letter

(90-100%) A

(87-89%) A-

(84-86%) B+

В

(80-83%)

(77-79%) B-

(74-76%) C+

(73-70%) C

(65-69%) C-

(60-64%) D

(<60%) F

Assignment	Percentage Points	Due Date
Module 4 Assignment – Hecht, Schlaer, & Pirenne Exp	1	8:00am 9/3
Module 6 Assignment – Reverse Hermann Grid	3	8:00am 9/17
Module 7 Assignment – Selective Adaptation – A Tilt After-Effect	2	8:00am 9/22
Module 8 Assignment – SF Specific Adaptation	3	8:00am 9/30
Module 9 Assignment – Build a Robot	1	8:00am 10/6
Module 12 Assignment – Head in Mirror	2	8:00am 10/22
Module 13 Assignment – CDT	3	8:00am 11/1
Total Percentage Points:	15	
Module 12 Bonus Assignment – T-Rex	3	8:00am 12/7
Total Possible Percentage Points with Bonus	18	

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