

Course: **Sensation and Perception**
 PSYC 415

Prerequisite: PSYC110 & PSYC330

Instructor: James E. Horton
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 Office Hours: Posted on the Web Site

Textbooks: (Required) Goldstein, E. Bruce. (1994). Sensation and Perception. (5th edition).
 Brooks/Cole Publishing Company, Pacific Grove, CA.

Course Requirements: This course will cover a variety of topics in sensory and perceptual processes and will introduce the student to the psychophysical aspects of sensation as they relate to the psychological aspects of the perceptual processes. Your participation is entirely your responsibility but you will be expected to answer the questions and assignments given to you during the course of this independent study. You will be allowed to work at your own pace but you will be expected to finish the course in the allocated term. You will be expected to demonstrate knowledge in the following areas of Sensation and Perception.

- 1) The student should be able to demonstrate an understanding of research methods and psychophysics of sensory processes.
- 2) The student should have an understanding of the perceptual phenomena involved in the visual system and the underlying psychophysical processes that contribute to the perceptions.
- 3) The student should understand color vision at the sensory level and higher cortical levels as well as understanding the interaction of different cortical levels in the perception of color.
- 4) The student should have an understanding of the perception of hearing and the underlying psychophysical processes contributing to one's perception of sound.
- 5) The student should understand the perceptual processes of gustation and olfaction and the underlying psychophysical processes.
- 6) The student should have an understanding of the perception of touch and pain, the underlying psychophysical processes of the sensation of pain and the psychological processes underlying the individual differences in the perception of pain.
- 7) The student should understand basic aspects of neural functioning during form perception, attentional processes and neural development that contribute to individual differences in sensory and perceptual processes.

Exams: There will be six open book exams.

Grading: Your Grade will be determined by your performance on the exam questions. All exams must be turned in by the last day of class without exception.

Computer Skills:

All students graduating from UVa-Wise must be able to demonstrate computer proficiency. Please refer to p.79-80 of the 2004-2005 College Catalog. If you do not believe that you can meet this requirement, additional instruction will be provided. See your advisor.

Honor Code: The Honor Code of The University of Virginia's College at Wise is fully and unconditionally

supported in this course. Violations of the Honor Code will be prosecuted through the Honor Court.

Class Attendance: Each student is expected to work on their own and complete the assignments. If a class meeting is needed, it will be scheduled as conveniently as possible for the student. The student will be expected to attend any scheduled meetings.

Special accommodations: If you have any type of learning disability or problem that might require special accommodations, please inform me at the beginning of the term to enable appropriate arrangements to be made.

Reading Assignments and Schedule

<u>Date</u>	<u>Chapter & Topics</u>
1/21	Syllabus & Introduction
	Chapter 1 Chapter 1 Introduction to Perception
1/28	Chapter 2 Receptors and Neural Processing
(2/4)	Chapter 3 The Lateral Geniculate Nucleus and Striate Cortex
	Appendix A Signal Detection: Procedure and Theory
2/11	Exam 1 Due
	Chapter 4 Higher-Level Visual Processing
(2/18)	Chapter 5 Perceiving Objects
	Chapter 6 Perceiving Color
2/25	Exam 2 Due
	Chapter 7 Perceiving Depth and Size
(3/3)	Chapter 8 Perceiving Movement
(3//10)	SEMESTER BREAK
3/17	Chapter 9 Perception and Action
(3/24)	Exam 3 Due
	Chapter 10 Sound, the Auditory System and Pitch Perception
3/31	Chapter 11 Auditory Localization, Sound Quality, and the Auditory Scene
(4/7)	Chapter 12 Speech Perception
4/14	Exam 4 Due
	Chapter 13 The Cutaneous Senses
(4/21)	Chapter 14 The Chemical Senses
4/28	Exam 5 Due
	Chapter 15 Perceptual Development
	Chapter 16 Clinical Aspects of Vision and Hearing
5/5	Exam 6 Due All exams must be turned in by this date (without exception)
5/6	READING DAY