SENSORY PROCESSES Psych2E03

Instructor: Professor K. M. Murphy; Office - PC315
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Department of Psychology

office hour: Tuesday 11am-12pm

Lectures: Thursday 7:00-10:00pm BSB-147

Teaching Assistants:

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World Wide Web http://sciwebsserver.science.mcmaster.ca/Psychology/psych2e03


- Introduction to the study of sensory and perceptual processes. Chapter 1
- Introduction to the Visual System Receptors and Neural Processing. Chapter 2
- The Lateral Geniculate Nucleus and Striata Cortex— anatomy, physiology, and perceptual processing of the central visual system. Chapter 3
- Higher Level Visual Processing — parallel processing streams and specialized neural processing of visual stimuli. Chapter 4 (NOT pg. 130-137 )
- Psychophysics -- the experimental methods used to study the relationship between sensations and physical stimuli. Chapter 1 pg. 11-18.
- Perceiving Objects -- extraction and recognition of features and objects in the visual environment. Chapter 5 (NOT pg. 165-168)
- Perceiving Colour -- physiological and psychophysical studies. Chapter 6

- Mid-term Test Thursday October 17 7:00-9:00pm 25% of final grade

- Perceiving Depth and Size -- various cues to depth and the underlying physiological mechanisms. Chapter 7
- Perceiving Movement -- eye movements, vestibular system; the detection and discrimination of objects moving in the environment. Chapter 8
- The Chemical Senses -- the anatomy, physiology, and psychophysics of the sensations of taste and smell. Chapter 14

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- The Cutaneous Senses -- the receptors, neural pathways, thresholds, and adaptation of the sensations of touch. Chapter 13
- Auditory system -- sound; structure of the ear and arrangement of the central auditory pathways. Chapter 10
- Perception of Sound -- the detection and subjective dimensions of sounds. Chapter 11
- Speech Perception -- speech stimulus and perception. Chapter 12
- Attention -- the various methods used to select among the numerous stimuli available in our environment. Chapter 4 pg. 130-137; Chapter 5 pg. 165-168.
- Perceptual constancy -- objects in the environment have a relatively constant set of properties, such as size, shape, colour. However, a number of factors can influence our perception of those properties. Chapter 6 pg 206-215; Chapter 7 pg 25-260.

**Final Exam -- All Course Material, 40% of final grade**

**In-Class Laboratories** -- Write-up one of the two in-class labs (approximately 5 typed double-spaced pages), 20% of final grade.

In-Class lab 1 -- September 19 - due October 3

In-Class lab 2 -- October 31 - due November 14

**Definition of Terms** -- Write-up 2 definitions (2 typed double-spaced pages), each one from a different set of terms, 7.5% each, total 15% of final grade. Definitions due:

Definition 1 -- September 26

Definition 2 -- October 24

Definition 3 -- November 21

**Evaluations**

- Lab Report 20%
- Definitions 15%
- Term Test 25%
- Final Exam 40%

  - 90-100 A+
  - 85-89 A
  - 80-84 A-
  - 77-79 B+
  - 73-76 B
  - 70-72 B-
  - 67-69 C+
  - 63-66 C
  - 60-62 C-
  - 57-59 D+

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Final marks may be adjusted up or down, on an individual basis, in light of special circumstances and/or the student's overall performance in the course.

Lab reports or Definitions handed in late will lose one letter grade for each day past the due date.