PSYC64S COURSE SYLLABUS: WINTER 1997

SENSORY AND MOTOR SYSTEMS

Course Details

Instructor:

Professor N.W. Milgram
Room S-637
287-7402
Office hours: W 14:00-16:00
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Teaching Assistants:

Janelle LeBoutillier
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Liz Adams
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Classrooms And Scheduled Times:

M 1200-1400 Room R3232
W 1200-1300 Room R3232

Tutorials:

Thursday 1100-1200 Room R3230
Friday 1200-1300 Room R3228

Course Description

This course is concerned with the neurobiology of sensory and motor systems. The goal will be to understand how the external world is encoded (sensory coding), recognized (perception) and manipulated (motor control). The course will start with vision. The topics discussed will include: image formation, visual transduction, retinal coding and CNS processing.

Subsequently, we will cover the other sensory systems, which include the auditory system, somatosensory system (touch, thermosensitivity, kinesthesia,), olfactory system and gustatory system.

The last topic covered will be motor control and this will be divided into two parts: 1) brain stem and spinal mechanisms involved in the control of movement and 2). control and coding over movement by the central nervous system.

Course Materials

There is no assigned texbook. The students will be responsible for all material covered in lectures for the exams. Nearly all of the material will be covered in lecture notes, which can be purchased at cost.

Tutorials

Tutorials will meet weekly or biweekly and will be used to:

1. organize group projects.
2. discuss lecture material and assigned readings.

Grading

Grades will be based on two midterms (February 12th and March 6th) worth 20% each (40% in total), a comprehensive final exam worth 40% and a tutorial grade worth 20 %.

The tutorial grade will be based on:

Class participation	7%
Projects	13%

Schedule

Week	Topic	Reading
1 - Jan 6	Introduction; Sensation and Perception	Chapter 8
8	The visual stimulus;	
2 - Jan 13	Vision: image formation; sensory transduction	
15	Retinal coding	
3 - Jan 20	Vision CNS Processing	
22	Vision	
4 - Jan 27	Sensory codes; context and attention	
29	The auditory system: auditory processing	Chapter 9
5 - Feb 3	Audition peripheral mechanisms	
5	Audition Central mechanisms	
6 - Feb 10	Audition Central mechanisms	
	Feb 12 Exam 1: Auditory and Visual system	
Feb 17 - 21	No classes. Reading week	
7 - Feb 24	Olfaction	Chapter 10
8 - Mar 3	Taste	Chapter 10

9 - Mar 10	Somatosensory System	Chapter 11
10 - Mar 17	Somatosensory System	Chapter 11
11- Mar 24	Movement	Chapter 12

March 26: Exam 2 covers everything from first exam to material covered on March 11

12 - Mar 31	Movement	
13 - April 7	Movement	