

LUCY C.

PSY B50F Sensation and Perception
1995-96

Lectures: Monday, 3:00-5:00 H214
Practicals: Monday, 11:00-12:00 S3228
12:00-1:00 S3212
Friday, 11:00-12:00 S3228
12:00-1:00 S3228

Instructor: Joan Foley
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Telephone: 416-287-7424
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Office hours: Monday, 5:00-6:00
Friday, 9:30-10:30
2:30-3:30

It is best to make an appointment if you want to see me at other times.

Teaching Asst: Joe Mirabella
Room: S559
Telephone: 416-287-7435
email: giuseppe@psych.utoronto.ca
Office hour: Wednesday, 10:30-11:30

Textbook: Coren, S., Ward, L.M. & Enns, J.T. Sensation and Perception (fourth edition), Harcourt Brace & Co., 1994. (Note: This same textbook will be used in PSY B51S, Perception and Cognition, which is taught by Professor John Kennedy. Chapters 1 through 8 and 10 through 12 will be dealt with in B50F and the remaining chapters in B51S.)

Objectives: The course will introduce students to what is currently understood about the normal functioning of the sensory-perceptual systems, with an emphasis on human systems. Some hands-on experience with methods of enquiry in this field will be provided. By the end of the course, the student should be able to:

- describe the basic facts about the effective stimulus events, the receptors, and the organization of the neural pathways for vision, audition and the chemical senses;
- understand and apply psychophysical methods;
- demonstrate knowledge of the basic sensory capacities and functions, such as *sensitivity, acuity, figure-ground segregation, discrimination, colour vision, pitch perception, depth perception, place principle...* etc.;
- explain key concepts, such as *noise, transduction, receptive field, inhibition, adaptation, summation, opponent process stereopsis., focal attention ...* etc.;
- understand the significance of the stimulus context in perception and the importance of what the perceiver brings to the processing of even "simple" stimulus events.

Lecture Schedule: Topics will be covered as follows:

Sept. 11	Introduction to the issues	Ch. 1
18	Light, the Eye, Image Formation, Limits of Vision	Chs.3-4
25	Visual Pathways, Receptive Fields, Dissociation Effects	Chs.3-4
Oct. 2	Acuity, Modulation Transfer Function, Contrast, Lateral Inhibition	Ch. 4
9	<i>no class</i>	
N.B. ...	<i>Wednesday, October 11, 5-6 p.m.</i>	<i>- TEST 1</i>
16	Colour Vision	Ch. 5
23	Colour Vision	Ch. 5
30	Depth Perception	Ch. 10
Nov. 6	Form Perception	Ch. 11
13	Sound and the Auditory System	Ch. 6
N.B. ...	<i>Wednesday, November 15, 5-6 p.m.</i>	<i>- TEST 2</i>
20	Hearing	Ch. 7
27	Speech and Music	Ch. 12
Dec. 4	Taste and Smell	Ch. 8

Schedule of Practicals:

Sept.	11,15	<i>no classes</i>
	18,22	Absolute threshold by method of limits
	25,29	Difference threshold by method of constant stimuli
Oct.	2, 6	Point of subjective equality by staircase method
	9,13	<i>no classes</i>
	16,20	Point of subjective equality by staircase method
	23,27	Theory of signal detection: Yes/No method
	30, 3	Theory of signal detection: Forced choice with rating
Nov.	6,10	Theory of signal detection
	13,17	Global versus local processing
	20,24	Feature analysis
	27, 1	Magnitude estimation of loudness
Dec.	4, 8	<i>no classes</i>

Evaluation: Term work will consist of two objective tests and five short reports on the practical work. There will be a final examination to be scheduled during the final examination period which will include an objective section covering material dealt with in the last part of the course and an essay section dealing with the whole course. Study questions from which the questions that will appear on the final exam will be drawn will be provided in advance.

TEST 1 (15%) Chs. 1, 3, 4, and all of Ch. 2 except for the sections
Wed. on the Theory of Signal Detection on pp. 26-39 and
Oct.11, 5pm 43-44, plus material covered in classes.

TEST 2 (15%) Chs. 5, 10, 11 and the sections on the Theory of
Wed. Signal Detection in Ch. 2 on pp. 26-39 and 43-44
Nov.15, 5pm plus material covered in classes.

REPORTS (25%) Five short reports, each weighted 5%

FINAL EXAM (to be scheduled between December 11 and 20)
(15%) Chs. 8, 6, 7, and 12 plus material covered in classes
(30%) Essay questions on whole course.