

Sensory Processes 2E03E

Thursdays 7 pm-10 pm

Venue: TSH B128

Course Instructor: Dr. Ullal, G.

Contact: Department of Psychology, Neuroscience and Behaviour.

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Office Hours: *There are no specific “Office Hours”. Please feel free to email either me or our TAs and make an appointment for any day during the week. Around the mid-term examinations and before the final examination special time-slots will be provided.*

Names of **teaching assistants**, their email IDs and office-contacts will be provided.

Course Description and Objectives:

Basic survival of an organism relies upon its knowing the world that surrounds it. The fundamental system that underlies this knowledge is what “Sensory Processes” is all about. Perhaps, it may not be an exaggeration to state that in sensory mechanisms one sees the ‘constant endeavor’ of human consciousness to explore the world around. Exploring this is indeed an exciting task. The ever-growing tools of investigation make this attempt even more fascinating. Further, the clinical vignettes serve as ‘road-maps’ for our exciting and ambitious journey towards understanding the brain through Sensory Processes.

Textbook:

The text that for the course is Goldstein, E.B. Sensation and Perception. 7th Edition. Thomson-Wadsworth Publication. 2007.

NOTE: Examinations are based on lectures. The lectures will cover material from the textbook as well as from outside sources. Skeleton PowerPoint slides for the lecture will be posted prior to every class. Students are advised to make their own notes in class.

Journal Articles for Home-Assignment: Besides the textbook, two journal articles will be reviewed in the course. The PDF format of the papers will be posted at an appropriate time during the course.

NOTE:

- a. Students are required to study the article and address a few questions pertaining to it in the form of home-assignments. The questions will be provided.
- b. Both the assignments **together**, will be worth **20%** of the final grade.
- c. **The assignments must be submitted to the allotted TA prior to the specified dates.** A penalty of 10% /day will be applied for delayed submission. By 3rd day, the assignment will get a zero. In the event of an illness or any legitimate reasons, an official permission should be routed through the Administration excusing the delayed submission.
- d. The assignments must be typed and double-spaced. Emailing of assignments is not permitted.
- e. Language will not be an issue in the marking. Point-form of answers will suffice.

Evaluations

1. **First midterm examination:** The midterm examinations will be worth **20%** of the final grade. Only material covered in class in all the lectures prior to 1st midterm examination will be on 1st midterm examination. Besides **multiple choice questions** there will be a few **short answer** type questions comprising of definitions and some important concepts discussed in class.
2. **Second midterm examination:** The midterm examinations will be worth **20%** of the final grade. Only material covered in class in all the lectures after the 1st midterm examination and prior to 2nd midterm examination will be tested. Besides **multiple choice questions** there will be a few **short answer** type questions comprising of definitions and some important concepts discussed in class.

3. **Final examination:** It will be worth **40%** of final grade. It will test the material covered in the entire course. This will be entirely based on **multiple-choice questions** (there will not be short-answers on the final examination). Dates for the midterm examinations are indicated in the List of Lectures below. Date for the final examination will be determined by the Registrar's Office.
4. **Assignments:** There will be **TWO** home assignments, **each** worth **10%** of the final grade. They will be based on two journal articles. They have to be submitted to the TAs by the absolute deadlines that will be indicated.

NOTE: A penalty of 10% /day will be applied for delayed submission. By 3rd day, the assignment will get a zero. In the event of an illness or any legitimate reasons, an official permission should be routed through the Administration excusing the delayed submission.

Remarking of Assignments or Short Answers: Requests for remarking of an Assignment or a Short Answer is only considered after a student provides a written request giving the reasons for the request to either, Dr. Ullal or the concerned TA.

Missed Examinations: There will **NOT** be a re-examination for missing any of the midterm examinations. However, if a student misses any examination owing to an illness or any other legitimate reason, the final examination will be rated proportionately higher provided an official permission is routed through the University Administration. No examination will be re-scheduled unless there is cancellation of the class by the University.

Conflict Of Examinations: Both the midterm examinations are conducted during the regular class-hour. If any other examination conflicts with this examination, please contact the authorities conducting the other examination.

Important Announcements: Important announcements regarding the course will be periodically posted in the **Announcement Box** of the course. Please check the website often.

MCMASTER UNIVERSITY GRADING SCALE:

Grade	Equivalent Grade Point	Equivalent Percentages
A+	12	90-100
A	11	85-89
A-	10	80-84
B+	9	77-79
B	8	73-76
B-	7	70-72
C+	6	67-69
C	5	63-66
C-	4	60-62
D+	3	57-59
D	2	53-56
D-	1	50-52
F	0	0-49

Schedule of lecture topics and reading

NOTE

1. First midterm examination will cover all material taught in class from first day of class till the last lecture (inclusive) before the 1st midterm examination.
2. Second midterm examination will cover all material taught after the 1st midterm examination till the last lecture (inclusive) before the 2nd midterm.
3. Final examination is cumulative of entire material taught in the course.
4. The topics listed below will follow the dates against them approximately.
5. Lectures do not strictly go by the text. All exams are based on lecture-material covered in class.

Session	Date	Topic	Suggested reading from the text
1	10 th Jan	Introduction	Ch 1
2	17 th Jan	Organization of Sensory system	Part of Ch 2
3	24 th Jan	Investigating the Sensory System	Ch 1
4	31 st Jan	Micro organization of Sensory System	Part of Ch 2
5	7 th Feb	1st In-class midterm examination followed by lecture- Vision-1: Eye ball, Accommodation.	
6	14 th Feb	Vision-2: Retinal architecture and ERG	Ch 3
7	28 th Feb	Vision-3: Retinal biochemistry and physiology	Part of Ch 2 and Ch 3
8	6 th March	Vision-4: Visual pathway and LGN	Ch 3 and Ch 4
9	13 th March	Vision-5: Organization of Visual Cortex; The two Visual Streams	Ch 4
10	20 th March	2nd In-class midterm examination followed by lecture- Vision-6: Colour Vision	Ch 7

11	27 th March	Vision-7: Depth Perception and Optical Flow; Face Perception.	Ch 8 Ch 5
12	3 rd April	Audition: External, middle ear and internal ear structure. Middle ear functions. Mechanism of hearing, Sound localization, Auditory pathway.	Ch 11 Ch 12

A Note on Academic Dishonesty

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at <http://www.mcmaster.ca/academicintegrity>

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group-work.
3. Copying or using unauthorized aids in tests and examinations.

Message from the Chair of Psychology

The Instructor cannot be responsible for returning long distance calls from students. Any student wishing to reach an Instructor is invited to e-mail the instructor.