# **Perception and Cognition**

## I) Course information

Course code: PSYB51H3 S L01 & L60

Time: Fridays 12-3pm. Lectures will be posted on BackBoard (BB), usually no later than 24hrs than the actual lecture. Lectures will be available throughout the term.

Location: SW309

Prerequisites: PSYA01 & PSYA02 (cannot be waived; sorry, no exceptions)

## II) Blurb

Theory and research on perception and cognition, including visual, auditory and tactile perception, representation, and communication. Topics include cognition and perception in the handicapped and normal perceiver; perceptual illusion, noise, perspective, shadow patterns and motion, possible and impossible scenes, human and computer scene analysis, ambiguity in perception, outline representation. The research is on adults and children, and different species. Demonstrations and exercises form part of the course work.

#### III) Course staff:

#### Instructor:

Dr. Matthias Niemeier

## Teaching assistants:

Jiaqing Chen Matthew Lowe Lawrence Guo Chi-Hsun Chang Nina Lee

## IV) Textbook (required)

Title:Sensation and Perception, 4th editionAuthors:J. Wolfe et al.Publisher:SinauerISBN:978-1-60535-211-4

## V) Web page

### Course Web Site: BlackBoard (BB)

Here you will find the syllabus, and announcements. Also, I will put the lecture slides on that page.

Please check on a regular basis for announcements.

## VI) Contact:

#### E-mail: psyb51@utsc.utoronto.ca

Please direct emails to the dedicated course address. We will go through all emails and answer standard course questions or quick questions about content. At times we might refer you to the syllabus or to the announcements on BB. At other times we might ask to have longer questions (>5 min) or lists of questions answered during office hours.

#### Office hours (SW550)

Fridays, 3-4pm, additional office hours before exams

### VII) Evaluation

30% Mid-term test 1. Scheduled for TBA. Two hours.

30% Mid-term test 2. Scheduled for TBA. Two hours.

40% Final Term test. TBA. Two hours.

You are required to write the mid-terms as well as the final exam. All exams/tests will have multiple-choice and short-answer questions. The MCQs are meant to test your knowledge of the material. SAQs are included because they measure conceptual understanding of the material. Furthermore, SAQs will encourage you to work on your written communication skills.

#### VIII) How to do well in the course

**Know what material is expected:** Material on the exams will include lecture materials and text readings. Although the topics covered will overlap, different things may be emphasized in class than in the book or other readings. Exam questions will only refer to concepts discussed in class but you need the textbook material to better understand and enrich the lecture material. So, make sure to read all the required textbook materials and, of course, you need to go to / watch all lectures. The final exam will be cumulative in terms of the MCQs and non-cumulative in terms of the SAQs.

*Look out for concepts:* Concepts are the scaffold of knowledge. Details are important too, especially in a course like PSYB51. But you need a structure to make sense of all the details.

*Start studying now:* Avoid cramming. If you feel you have no time to study during week 1, you won't find time later. Note that postponing studying and pulling a couple all-nighters before an exam, is a poor strategy. Sleep is how we consolidate memories. Memorizing without sleep is like loading stuff onto a truck but leaving the doors open. When you drive around the next corner you'll loose it all.

*Make sure to read the textbook chapters before the respective lecture* so that it's easier to understand the lectures and so that your mind can form a cognitive structure of what to expect. If you take the online course don't let a week pass without watching one or more lectures.

*Learn in teams:* I highly recommend forming **study groups** and test and quiz one another with questions. Common excuses:

- "I don't know anybody in the course." But there is Facebook etc. to get in touch, right?
- "I have no time." See my earlier comment regarding time.
- "I'm smarter than the others. I won't get anything out of being a pro bono tutor." You are mistaken. Tutors learn more than anybody else.
- "I'm less smart than the others." Well, first off: I don't think that's true, everyone has their moment to shine. Secondly, make sure to be prepared for your meetings. Thirdly, read what I just said about tutors.

It is very helpful to meet with others and practice in such a way for exams especially because these are good simulations of writing SAQs during exams.

**Prepare "cheat sheets."** Just to be clear: using cheat sheets during tests/exams is an academic offence. But creating them is a helpful practice to learn. Here's how you do it: you take your lecture notes and copy the important things onto a few pages (cheat sheets need to be small of course). Well, it's likely that you end up with something that is still too large. So now you take your over-sized cheat sheets and condense the material further, and perhaps you do that several times. In the end you will have rehearsed the course material several times but more importantly: you will have summarized the material. Summarizing requires sound conceptual understanding of the material and therefore helps learning.

*Make use of office hours:* If you have questions about the course or its content, or if there are other ways in which you feel we can help you, do visit us during office hours. In the past few years I have seen and heard office hour attendance drop, probably for various reasons. But I get the sense that one reason might be people don't want to bother instructors or are worried that they look bad when they ask something. Don't think like that! Bring your study group if you like. Office hours are a resource for you guys. I have two hours available for you every week and I asked for and received extra funding for TA office hours to increase available face time.

### IX) Missing an exam:

Under exceptional circumstances you may miss a **mid-term test**. Valid reasons are: a verified illness, a serious family emergency or religious observances (invalid reasons: vacations, time conflicts with other courses, or with work schedules). In most instances you will need to provide documentation for your valid reason. For example, with respect to absences due to illness, you will need to provide a valid UTSC Medical Certificate. It is your responsibility to make sure that medical certificates are

- filled out *completely and sufficiently*,
- filled out by an expert (medical doctor, counselor etc. see top of the certificate)
- filled out on the day of the exam,
- submitted to me within one week of the mid-term.

Please note that I will insist on these 4 criteria because they are necessary and not difficult to fulfill. That is, documentation has to be clear about your medical condition. Only an expert can properly evaluate your condition, and only on the day that you are actually sick. Frequent excuses are that a family doctor is unavailable (but there always is a walk-in clinic that is open); that you have lost your health card (but you

can get a temporary card on the same day); that no one could drive you to the walk-in clinic (sorry, but then you need to take a taxi), that you are too ill to see a doctor (if your condition is really serious ... let's hope not! ... you should seek medical attention for your own sake!).

All documentation needs to be submitted to my office *within one week* of the missed mid-term. Note that it is not a difficult to submit a certificate because you can email me an electronic copy of your certificate (<u>psyb51@utsc.utoronto.ca</u>). Just make sure I can read the copy. I may however ask for the original paper version of the certificate later (e.g., I can't read something on the electronic copy). So, you do need to keep the original. Alternatively, you can submit your original certificate in person in my office (please write your email contact on it).

You will receive an email from me as to whether your reason for missing the mid-term was accepted and warrants re-weighting. *Missing both mid-terms is a really bad "idea" and will impact your grade - almost guaranteed*. So, do your best to stay healthy! If a student missed both mid-terms (and submitted valid documentation for it) I would have to create a *cumulative* make-up mid-term that covers material from both mid-terms. This is clearly more difficult than writing the mid-terms. For that reason, you do need to contact me. We'll set up an appointment to discuss how I can help you. This meeting is not optional but part of the requirement to be granted participation in the make-up mid-term.

	Date of the		Readings	Lectures tested on	Lectures tested on
Lec	lectures	Торіс	(chapters)	MCQs	SAQs
1	08-Jan	Welcome & Introduction	1		
2	15-Jan	Optics and the eye	2		
3	22-Jan	Spatial vision	3		
4	29-Jan	Objects	4		
	TBA	Mid-term test 1		1-4	1-4
			5 & 8 in part		
5	05-Feb	Colour & Motion	(p. 236-250)		
		Eye movements, Space	8 (p. 250-		
6	13-Feb	and depth	258) & 6		
	19-Feb	Reading week			
7	26-Feb	Attention	7		
8	05-Mar	More attention	(no chapter)		
	TBA	Mid-term test 2		5-8	5-8
		Sound and the ear;			
9	12-Mar	Hearing	9, 10		
10	19-Mar	Music & Speech	11		
		Touch, Multisensory			
11	26-Mar	integration	13		
		Olfaction and taste,	(14) & (15)		
12	02-Apr	Vestibular system	<b>&amp;</b> (12)		
	TBA	Final exam		<mark>1</mark> -12	<mark>9</mark> -12

## X) Schedule

Pdf's of lecture slides will be posted on Blackboard. I will not provide the ppt files for copyright reasons. But you can take notes on pdf's, too.

## XI) AccessAbility Statement

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca.

## XII) Academic Integrity Statement

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to: IN PAPERS AND ASSIGNMENTS: Using someone else's ideas or words without appropriate acknowledgement.Submitting your own work in more than one course without the permission of the instructor. Making up sources or facts. Obtaining or providing unauthorized assistance on any assignment. ON TESTS AND EXAMS: Using or possessing unauthorized aids.Looking at someone else's answers during an exam or test. Misrepresenting vour identity. IN ACADEMIC WORK: Falsifying institutional documents or grades. Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes. All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see http://www.utoronto.ca/academicintegrity/resourcesfor students.html).

## XIII) webOption

Each WebOption lecture is assigned a unique web address when the first lecture is posted.

Lectures will be available throughout the term. I urge you to watch one lecture per week as the absolute minimum, better is to repeat at least one additional lecture per week. You should watch no less than one lecture per week. Spreading lectures and reading materials across the term will help to remember the content better.

## **XIV) Course Policies**

For other academic regulations please also refer to the UTSC calendar.