

# Perception and Cognition

## I) Course information

Course code: PSYB51H3 S

Lectures will be posted on the webOption. Lectures are posted now and will be available throughout the term.

Prerequisites: PSYA01 & PSYA02 (cannot be waived, 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  
Adam Frost  
Ada Le

## IV) Textbook (required)

**Title:** Sensation and Perception, 3<sup>rd</sup> edition (no other edition)  
**Authors:** J. Wolfe et al.  
**Publisher:** Sinauer  
**ISBN:** 978-0-87893-972-7

## 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](mailto:psyb51@utsc.utoronto.ca)

Please direct emails to the dedicated course address. Either I or a TA 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 BB. At other times we might ask to have longer questions (>5 min) or lists of questions answered during office hours. If you do email me directly, I might forward your email to the TA which prolongs response time. Exception is if you have a question of personal matter directed to me. To help me recognize such emails please write 'PSYB51 – personal' in the subject section.

**Instructor office hours (SW550, inner office)**

Thursdays, 11:30am-12:30pm

Fridays, 2-3pm

**TA office hours (SW550, outer office)**

Mondays, 2:30-3:30pm

## 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 all exams. Exams 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) Doing 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 lose 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 you have a 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 the first or the second mid-term exam. Valid reasons are: a verified illness, a serious family emergency (e.g., a death in the family), or religious observances. With respect to absences due to illness, please note that you will need to provide a valid UTSC Medical Certificate. In that case, I will re-weight your other mid-term and your final exam (43% and 57%, respectively). However, I will re-weight only if you provide - **within 1 week** - valid documentation for your valid reason. Medical certificates need to be filled out **completely by an expert (medical doctor, counsellor etc.) on the day of the exam** that you are missing (you need to make sure they fill out everything that is necessary).

**Missing two mid-term exams:** Though rare, it is not impossible that students miss larger portions of the course including both mid-terms, e.g. due to a longer-term illness. In that case, you need to provide documentation as explained above and **also you need to contact me**. We'll set up an appointment to discuss how I can help you. Shortly after mid-term 2 there will be a make-up exam covering material from the two mid-terms.

## X) Schedule

Lec	Original Date of lecture (all available online now)	Topic	Readings (chapters)	Chapters tested on MCQs	Chapters tested on SAQs
1	10-Jan-14	Welcome & Introduction	1		
2	17-Jan-14	Optics and the eye	2		
3	24-Jan-14	Spatial vision	3		
4	31-Jan-14	Objects	4		
	<b>TBA</b>	<b>Mid-term 1</b>		<b>1-4</b>	<b>1-4</b>
5	07-Feb-14	Colour & Motion	5 & (8)		
6	14-Feb-14	Eye movements, Space and depth	(8) & 6		
7	28-Feb-14	Attention	7		
8	07-Mar-14	More attention	(no chapter)		
	<b>TBA</b>	<b>Mid-term 2</b>		<b>5-8</b>	<b>5-8</b>
9	14-Mar-14	Sound and the ear; Hearing	9, 10		
10	21-Mar-14	Music & Speech	11		
11	28-Mar-14	Touch, Multisensory integration	13		
12	04-Apr-14	Olfaction and taste, Vestibular system	(14) & (15) & (12)		
	<b>TBA</b>	<b>Final exam</b>		<b>1-15</b>	<b>9-15</b>

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](mailto: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

your 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/resourcesforstudents.html>).

### **XIII) webOption**

Lectures are available through WebOption throughout the term.

My recommendation is to watch one, or better two lectures per week. You should watch no less than one lecture per week. Spreading lectures and reading materials across the term will help remember the content better.

### **XIV) Course Policies**

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