

Perception and Cognition

I) Course information

Course code: PSYB51H3 S LEC01 & LEC60

Time: Lectures are posted on BackBoard (BB) throughout the term.

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

Adam Frost

Nina Lee

IV) Textbook (required)

Title: Sensation and Perception, 4th edition

Authors: J. Wolfe et al.

Publisher: Sinauer

ISBN: 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, 3:15-4:15pm, additional office hours before exams

VII) Evaluation

25% Mid-term test 1. Scheduled for **TBA**. 100 min.

25% Mid-term test 2. Scheduled for **TBA**. 100 min.

50% Final exam. TBA. Two hours.

2% Bonus for 8 passed quizzes (out of 12 quizzes total) (passed = scores 50% or better)

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.

Quizzes are meant to encourage you to listen to lectures and read textbook chapters on a weekly basis. Given this objective, it follows that there is no opportunity to make up for missed quizzes and also that the material tested in the quizzes comes from lecture and readings for the respective week. Quizzes will consist of 10 multiple-choice questions about the respective lecture. Quizzes are offered online and will take about 15-20 min. You need passing scores for 8 or more quizzes to get 2%.

VIIa) Using the final exam to make up for grades

An ideal university program would have no mid-terms and final exams but entry tests into the subsequent courses because obviously the idea is that courses teach with an expiry date much longer than the course itself. To encourage longer-term maintenance of course materials in your head I offer you a chance to make up for grades that works if you apply longer-term learning strategies.

To this end, the final exam is cumulative such you can use parts of the final exam to make up for mid-term grades. Here is how:

Step 1: You do need to at least get 40% in your mid-term 1 to be eligible to improve the mid-term grade with your final. Likewise you need to at least get 40% in your mid-term 2 to have a chance of improving the grade during the final.

Step 2: You write the final exam that consists of three parts. The first part covers material from mid-term 1. Your score for that part can be used to replace your score for your mid-term 1 grade. The second part of the final covers material from mid-term 2, and your score can be used to replace your mid-term 2 grade.

In detail:

- The first midterm (25%) will cover Part I (Lectures 1-4).
- The second midterm (25%) will cover Part II (Lectures 5-8).
- A cumulative final exam (50%) will cover all Parts (Lectures 1-12)
= 10% [Part I] + 10% [Part II] + 30% [Part III] = 50%.

However, if your performance on the final exam with respect to Part I or Part II is greater than your performance on the respective term test, then I will let your performance on that part of the final exam assume a weight of 35% and your term test grade will not count. In other words, if you can improve from the term test to the final exam, then the term test will be nothing but a practice test.

Note that these rule apply to those people who passed their mid-term 1 and/or 2. The reason for this extra rule is to prevent procrastination in that students might not prepare for the mid-terms *at all* and try to focus on the final exam. Note further that in order for these rules to apply you need to participate in the mid-terms.

Here the formalized rules:

Mid-term 1 = MID1

Mid-term 2 = MID2

Final Part I = FIN1

Final Part II = FIN2

Final Part III = FIN3

If FIN1 better than MID1 and if $MID1 \geq 50\%$, then FIN1 weighs 35%, MID1 weighs 0% of total grade.

If MID1 better than FIN1, then MID1 weighs 25%, FIN1 weighs 10% of total grade.

If FIN2 better than MID2 and if $MID2 \geq 50\%$, then FIN2 weighs 35%, MID2 weighs 0% of total grade.

If MID2 better than FIN2, then MID2 weighs 25%, FIN2 weighs 10% of total grade.

FIN3 always weighs 30%.

VIII) How to do well in the course

PSYB51 is no bird course. There are many details that you need. Therefore you need to spread your studying across the entire term. Waiting with your preparations for the tests to come up is not a good strategy at all. On the other hand, a lot of things in PSYB51 are very logical and it is very well possible to get an A or even A+ in the course. Indeed you don't need to be Einstein to get 100% in the course. Here is what you should do to do well.

Read the textbook. Attend/watch all lectures. Take your own notes. Sounds obvious? Well, then good for you. But I have witnessed students sharing each other's notes on Facebook rather than participating in the course and then utterly fail the exams. Please do yourself a favour and take your own notes. Taking notes is learning. No other person's notes can replace the lectures or the textbook. Why not use what you have paid for?

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.

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.

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**. All students citing a documented reason for missed term work should be instructed to bring their

documentation to Course Coordinator, Ainsley Lawson in SW427C for tracking purposes. 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 Ainsley within 3 business days 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 Ainsley Lawson ***within 3 business days*** of the missed mid-term.

After the documentation has been logged, Ainsley will send an email to the student and their course instructor(s) within 2 business days, containing a stamped departmental document detailing the affected date(s), along with a copy of the student's original document(s). If your documentation has been approved I will reweight your other grades. That is, the mid-term that you missed will not count and the other mid-term will have a weight of 35%, and the final will have a weight of 65%. There is no make-up mid-term if you miss one of the two mid-terms.

However, there is a make-up mid-term if someone misses both mid-terms. If a student missed both mid-terms (and submitted valid documentation for it) **they would need to contact me** and alert me to this fact. Further, we'd set up an appointment to discuss how I can help with preparations for the ***cumulative*** make-up mid-term that covers material from both mid-terms. This meeting is not optional but part of the requirement to be granted participation in the make-up mid-term.

Note that in order for the make-up rules (VIIa) to apply you need to participate in the regularly scheduled mid-terms 1 and 2.

X) Schedule

Lec	Date of the lectures	Topic	Readings (chapters)	Lectures tested on MCQs	Lectures tested on SAQs
1	06-Jan	Welcome & Introduction	1		
2	13-Jan	Optics and the eye	2		
3	20-Jan	Spatial vision	3		

4	27-Jan	Objects	4		
	TBA	Mid-term test 1		1-4	1-4
5	03-Feb	Colour & Motion	5 & 8 in part (p. 236-250)		
6	10-Feb	Eye movements, Space and depth	8 (p. 250- 258) & 6		
	17-Feb	Attention	7		
7	24-Feb	Reading week			
8	03-Mar	More attention	(no chapter)		
	TBA	Mid-term test 2		5-8	5-8
9	10-Mar	Sound and the ear; Hearing	9, 10		
10	17-Mar	Music & Speech	11		
11	24-Mar	Touch, Multisensory integration	13		
			(14) & (15) & (12) info about required pages will be posted on BB		
12	31-Mar	Olfaction and taste, Vestibular system			
	TBA	Final exam		1-12	9-12

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 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

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.