

# Perception and Cognition

## I) Course information

Course code: PSYB51H3 S LEC99

Time: n/a online lectures

Location: n/a

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:

Lawrence Guo

Nina Lee

## IV) Textbook (required)

**Title:** Sensation and Perception, 5<sup>th</sup> or 4<sup>th</sup> edition

**Authors:** J. Wolfe et al.

**Publisher:** Oxford University Press, Series: Sinauer

## V) Web page

### Course Web Site: Quercus

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. 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)**

Wednesdays, 1-2 pm, 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 get 40% in your mid-term 1 as a minimum to be eligible to improve the mid-term grade with your final. Likewise you need to get 40% in your mid-term 2 as a minimum 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 get 40% or better in 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." Sure. There are a lot of smart cookies around at UTSC. But this isn't a pro bono thing; tutors learn more than anybody else.
- "I'm not as smart as 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 the TAs and I 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.

## IX) Schedule

Lec	Topic	Readings (chapters)	Lectures tested on MCQs	Lectures tested on SAQs
1	Welcome & Introduction	1		
2	Optics and the eye	2		
3	Spatial vision	3		
4	Objects	4		
	<b>Mid-term test 1</b>		<b>1-4</b>	<b>1-4</b>
5	Colour & Motion	5 & 8 in part (p. 236-250)		
6	Eye movements, Space and depth	8 (p. 250-258) & 6		
	<b>Reading week</b>			
7	Attention	7		
8	More attention	(no chapter)		
	<b>Mid-term test 2</b>		<b>5-8</b>	<b>5-8</b>
9	Sound and the ear; Hearing	9, 10		
10	Music & Speech	11		
11	Touch, Vestibular system	13, (12)		
12	Olfaction and taste, Multisensory integration	(14) & (15) info about required pages will be posted on BB		
	<b>Final exam</b>		<b>1-12</b>	<b>9-12</b>

Tests and exams will be scheduled by the administration. I will post information about the dates as soon as I receive it. 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.

### X) 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).

### XI) 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>).

## **XII) Missed Term Work due to Medical Illness or Other Emergency:**

All students citing a documented reason for missed term work must submit their request for accommodations **within three (3) business days** of the deadline for the missed work.

Students must submit **BOTH** of the following:

- (1.) A completed **Request for Missed Term Work Accommodations form** (<http://uoft.me/PSY-MTW>), and
- (2.) **Appropriate documentation** to verify your illness or emergency, as described below.

### **Appropriate documentation:**

For missed **TERM TESTS** due to **ILLNESS**:

- Submit the Request for Missed Term Work Accommodations form (<http://uoft.me/PSY-MTW>), along with an **original** copy of the official UTSC Verification of Illness Form ([uoft.me/UTSC-Verification-Of-Illness-Form](http://uoft.me/UTSC-Verification-Of-Illness-Form)) or an **original** copy of the record of visitation to a hospital emergency room. Forms are to be completed in full, clearly indicating the start date, anticipated end date, and severity of illness. The physician's registration number and business stamp are required.
- Note: If an end date of "ongoing" is specified, the medical note will be assumed to cover a period of two weeks. If no end date / an "unknown" end date is specified, the note will be assumed to cover a period of three business days (starting from the midterm date.)

For missed **TERM TESTS** due to **ACCESSABILITY REASONS**:

- Meet with your **AccessAbility consultant** and have them email Keely ([keely.hicks@utoronto.ca](mailto:keely.hicks@utoronto.ca)) detailing the accommodations required.

For missed **ASSIGNMENTS** due to **ILLNESS**:

- Submit the Request for Missed Term Work Accommodations form (<http://uoft.me/PSY-MTW>), along with a **hardcopy** of the Self-Declaration of Student Illness Form ([uoft.me/PSY-self-declare-form](http://uoft.me/PSY-self-declare-form)).

For missed **ASSIGNMENTS** due to **ACCESSABILITY REASONS**:

- If your desired accommodation is **within the scope** of your Accommodation Letter (ex. your letter includes "extensions of up to 7 days" and you need 3 days), submit the Request for Missed Term Work Accommodations form (<http://uoft.me/PSY-MTW>) and attach a copy of your letter. **Specify how many days extension you are requesting** on the request form.

- If your desired accommodation is **outside the scope** of your Accommodation Letter (ex. your letter includes “extensions of up to 7 days” but you need more time than that) you will need to meet with your **AccessAbility consultant** and have them email Keely ([keely.hicks@utoronto.ca](mailto:keely.hicks@utoronto.ca)) detailing the accommodations required.

For missed term tests or assignments in **OTHER CIRCUMSTANCES**:

Submit the Request for Missed Term Work Accommodations form (<http://uoft.me/PSY-MTW>), along with:

- In the case of a **death of a family member or friend**, please provide a copy of a death certificate.
- For U of T varsity-level or professional **athletic commitments**, an email from your coach or varsity administrator should be sent directly to Keely Hicks ([keely.hicks@utoronto.ca](mailto:keely.hicks@utoronto.ca)) **well in advance** of the missed work, detailing the dates and nature of the commitment.
- For **religious accommodations**, please email ([keely.hicks@utoronto.ca](mailto:keely.hicks@utoronto.ca)) **well in advance** of the missed work.
- For circumstances **outside of these guidelines**, please email Keely ([keely.hicks@utoronto.ca](mailto:keely.hicks@utoronto.ca)) on the date of the test / assignment deadline to describe your circumstances and ask what documentation would be appropriate

Documents covering the following situations are NOT acceptable: medical prescriptions, personal travel, weddings/personal/work commitments.

### **Procedure:**

Submit your (1.) [request form](#) and (2.) [medical/self-declaration](#)/other documents in person **WITHIN 3 BUSINESS DAYS** of the missed term test or assignment.

**Submit to:** Keely Hicks, Room SW420B, Monday – Friday, 9 AM – 4 PM. (Slide forms under door if out of office.)

After submitting your documentation, within approximately one to five business days, you will receive a response from your instructor detailing the accommodations to be made (if any).

**You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.**

You should continue to work on your assignments to the best of your ability, as extension accommodations may be as short as one business day, depending on the nature of the illness/emergency.

If an accommodation has been granted but you are unable to meet the conditions of the accommodation (ex. you need a longer extension, or you missed a make-up test), you will need to repeat the missed term work procedure and submit additional forms to request further accommodation. Note that in the case of a missed make-up test, an opportunity to write a second make-up test may not be provided.

Completion of this form does NOT guarantee that accommodations will be made. The course instructor reserves the right to decide what accommodations (if any) will be made. Failure to adhere to any aspect of this policy may result in a denial of your request for accommodation.

### **Importance of Three Business Day window:**

If you are unable to submit your documents in-person within the three business day window, **you must email Keely** ([keely.hicks@utoronto.ca](mailto:keely.hicks@utoronto.ca)) **within the three business day window** to explain when you will be able to bring your documents in person. Exceptions to the documentation deadline will only be made under **exceptional circumstances**. Attach scans of your documentation, and be prepared to bring your documents to Keely in-person as soon as you are well. Late documents may not be accepted.

### **NOTE: Assignments due at end of term**

Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, you would need to file a petition with the Registrar's Office (<https://www.utoronto.ca/registrar/term-work>).

### **NOTE: Final Exams**

This policy applies only to missed assignments and term tests. Missed final exams are handled by the Registrar's Office (<http://www.utoronto.ca/registrar/missing-examination>).

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### **XIII) webOption**

Lectures can be accessed through Quercus or through the link below.  
<http://lecturecast.utoronto.ca/>

### **xiv) For Your Health**

The Health and Wellness Centre (SL270, 416-287-7065) provides diagnostic, treatment and referral services for all illnesses ranging from the medical to psychological to health promotion. The professional staff of physicians, nurses and counselors provides personal advice and assistance with family issues, eating disorders, depression, stress, drug and alcohol abuse, relationship issues, a positive space for gender/sexuality issues, and more.

<http://www.utoronto.ca/wellness>