# University of Waterloo Department of Psychology Psychology 306 Perception Fall, 2018 Tuesday and Thursday, 1000 – 1120 AM, PAS 2083

### Instructor and T.A. Information

Instructor: Colin Ellard Office: PAS 4036 Office Phone: 519-888-4567 ext 36852 Office Hours: Monday 11-12 pm or by arrangement Email: <u>cellard@uwaterloo.ca</u>

The best way to reach me is by email. You can normally expect a response from me within 24 hours. I will hold regular office hours on Wednesdays but you can reach me at other times and I will do my best to set an appointment for either a face to face meeting or a phone call with you at a time that works for both of us.

T.A.

**Ryan Yeung** 

Email: rcyeung@uwaterloo.ca

Office hours TBA

### **Course Description**

What we perceive through our senses makes up much of our conscious experience. This course examines how visual and auditory perception arises and includes topics such as how we become aware of colour, form, space, brightness, loudness, and pitch, and how this information guides behaviour. We will spend most of our time looking at the visual system, but we will also spend time looking the auditory system. Because of time constraints, we will not be able to cover the sense of touch or the chemical senses—taste and smell. If you would like to explore these senses on your own, you may choose a final essay topic based on this material.

### **Course Goals and Learning Outcomes**

Upon completion of this course, students should be able to:

A. Describe the broad operation of the visual and auditory senses

- Describe the relevant anatomy and physiology of sensory pathways
- Describe the most important findings related to human perception
- B. Begin to appreciate how the principles of perception affect everyday life
  - Describe several important aspects of the visual sense that contributes to our conscious experience of the visual world
  - Describe several important aspects of the auditory sense that contributes to our conscious experience of the visual world
- C. Write a short integrative essay about a personally interesting aspect of perception.
  - Understand the format and know how to read a journal article in perception
  - Know how to conduct a literature search in psychology
  - Begin to think critically about how experiments in perception are performed, the relationships among experiments, and be able to describe these relationships

## **Required Text**

• Wolfe, Kluender, and Levi (2017). Sensation & Perception (fifth edition). Sunderland, Mass.: Sinauer Press.

# **Readings Available on LEARN**

- Course notes associated with each module
- Occasional enrichment articles (not required reading)

I may include some links, notes, and other readings on the course website that you may find useful. The content of my notes may be tested in assessment exercises, but the content of the links and any extra journal articles will not be required reading, though this content may help you to understand parts of the course.

### **Course Requirements and Assessment**

Assessment	Date of Evaluation (if known)	Weighting
Weekly check-ins	Various	
Mini-midterm	September 27	5%
Midterm 1	October 25	30%
Midterm 2	November 29	30%
Final paper	Due December 3	5+20%

Total	100
lotal	10

## Notes on Assessments

### Weekly check-ins

Each week you will be asked to complete a short response in the weekly discussion forum. Completion of each item will be worth 1% up to a maximum of 10% . The forums will open on LEARN just after the lecture (dates given in syllabus) and they will normally close on the following day at 11:55 pm. You MUST complete the response in the given time frame in order to receive the credit. In order to accommodate students who register late for the course, the online discussion forums for the first two check-ins will remain open until 11:55 pm on September 22. Following this, item completion must occur by the normal deadline described above.

### Mini-midterm

Because students often feel some anxiety about heavily weighted midterms, I'm going to give you a quick (30 minute) mini-midterm on September 27 with low stakes (5%). The format and degree of difficulty of the questions will be the same as what you will see on the other two midterms.

### Midterms

The midterms will contain both objective (multiple choice) and written answer questions and will cover all material covered up to the date of the test. Each midterm will cover approximately half the course (the first midterm will also cover the same ground as the minimidterm but with different questions). I've listed the weighting for the two midterms as 30%. To give you a little advantage and hopefully to lower your stress levels, I will weight one of the two midterms at 25% and the other at 35%, whichever gives you the higher final grade. This re-weighting will take place following grading of the second midterm.

## **Final Essay**

You will be required to write a 2000 -2500 word essay based on a topic of your choice within the constraints described in the LEARN module. Your paper will consist of a critical review of one or more journal articles, or a description of how the principles of perception apply to an everyday situation (some examples will be given). Before writing the essay, you are required to write a one paragraph summary of your proposed topic, including three references from peer-reviewed sources. The summary will be worth 5%. The full paper will be worth 20%

## **Course Outline**

We will cover the content of the first 11 chapters of the textbook. I will try to provide powerpoint slides on the course website 24 hours prior to the lecture but, failing this, the slides will always be there by the morning of class. You should treat the syllabus below as a rough guide. Sometimes things take a little longer to go through and some don't. The best way to know what's going on in the course is to show up for class! I will expect you to come to class prepared to ask and to answer questions, so reading in advance is a good idea. Also note that looking at the powerpoint slides is not a good substitute for attending class.

Week	Date	Торіс	Readings Due
1	September 6	Introduction	Chapter 1
2	September 11	The first steps in vision	Chapter 2
3	September 18	Spatial vision	Chapter 3
4	September 25	Perceiving and recognizing objects	Chapter 4
	September 27	Mini-midterm+lecture	
5	October 2	Colour	Chapter 5
6	October 9	Fall break	
7	October 16	Space	Chapter 6
8	October 23	Attention, scene perception	Chapter 7
	October 25	Midterm 1	
8	October 30	Motion perception and visuomotor	Chapter 8
		behaviour	
9	November 6	Hearing: Physiology and Acoustics	Chapter 9
10	November 13	Hearing in the Environment	Chapter 10
10	November 20	Music and Speech Perception	Chapter 11
11	November 27	Review and summary	
	November 29	Midterm 2	

# Late Work

The final paper is to be completed by 11:55 pm on December 3, and submitted to a dropbox on LEARN. Students submitting late work will be assessed a penalty of 5% per day or partial day (including weekends) up to a maximum of 35% (7 days). Following this, written work will no longer be accepted for grade. Weekly check-ins will not be accepted after the deadline.

# **Experiential Learning with SONA**

Since experiential learning is highly valued in the Department of Psychology, students may earn a "bonus" grade of up to 4% in this course through research experience. Course work will make up 100% of the final mark and a "bonus" of up to 4% may be earned and will be added to the final grade if/as needed to bring your final grade up to 100%.

The two options for earning research experience grades (participation in research and article review) are described below. Students may complete any combination of these options to earn research experience grades.

## **Option 1: Participation in Psychology Research, Research Experiences Group (REG)**

Research participation is coordinated by the Research Experiences Group (REG). Psychology students may volunteer as research participants in lab and/or online (web-based) studies conducted by students and faculty in the Department of Psychology. Participation enables students to learn first-hand about psychology research and related concepts. Many students

report that participation in research is both an educational and interesting experience. Please be assured that all Psychology studies have undergone prior ethics review and clearance through the Office of Research Ethics.

# Educational focus of participation in research

To maximize the educational benefits of participating in research, students will receive feedback information following their participation in each study detailing the following elements:

Purpose or objectives of the study Dependent and independent variables Expected results References for at least two related research articles Provisions to ensure confidentiality of data Contact information of the researcher should the student have further questions about the study

Contact information for the Director of the Office of Research Ethics should the student want to learn more about the general ethical issues surrounding research with human participants, or specific questions or concerns about the study in which s/he participated.

Participation in LAB studies is worth 0.5 participation credits (grade percentage points) for each 30-minutes of participation. Participation in ONLINE studies is worth .25 credits for each 15-minutes of participation. Researchers will record student's participation and will advise the course instructor of the total credits earned by each student at the end of the term.

# How to participate?

Study scheduling, participation and grade assignment is managed using the SONA online system. All students enrolled in this course have been set up with a SONA account. You must get started early in the term.

For instructions on how to log in to your SONA account and for a list of important dates and deadlines please, as soon as possible go to:

\*\*\* Please do not ask the Course Instructor or REG Coordinator for information unless you have first thoroughly read the information provided on this website.\*\*\*

More information about the REG program is available at:

**REG Participants' Homepage** 

## Option 2: Article Review as an alternative to participation in research

Students are not required to participate in research, and not all students want to do so. As an alternative, students may opt to gain research experience by writing short reviews (1½ to 2 pages) of research articles relevant to the course.

You must contact your TA to get approval for the article you have chosen before writing the review. Each review article counts as one percentage point. To receive credit, you must follow specific guidelines. The article review must:

Be submitted before the last day of lectures. Late submissions will NOT be accepted under ANY circumstances.

### **Information on Plagiarism Detection**

I have chosen not to use plagiarism detection software in this course. You should know, however, that both the teaching assistant and I have an expert eye for cheating developed over many years of experience. Any suspected violations of the University's integrity policy will be treated seriously and reported to the associate dean. As per the note on integrity below, it is the student's responsibility to understand what plagiarism is and to avoid committing it.

### **Electronic Device Policy**

Many students like to use notebook or tablet computers during class. If you choose to do so, please be mindful of the possibility that your use of electronics could be distracting to your classmates. Please restrict your use of such devices to activities related to class content (eg. Note-taking), and keep such devices muted during the lecture.

## **Attendance Policy**

There is ample evidence that students who attend class regularly do better than those who don't. This, and the fact that you're investing a large amount of money to obtain a good education, should make questions about class attendance a no-brainer. You should come to class as often as you can. If you do miss a class, you will need to find a classmate to share notes with you. As much as I like talking about perception, I simply don't have the time to repeat classes for you during office hours or over email.

## Academic Integrity

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the <u>UWaterloo Academic Integrity webpage</u> and the <u>Arts Academic Integrity webpage</u> for more information.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning

how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline. For typical penalties check <u>Guidelines for the Assessment of</u> <u>Penalties</u>.

### **Concerns About a Course Policy or Decision**

Informal Stage. We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Richard Eibach) is available for consultation and to mediate a resolution between the student and instructor: Email: reibach@uwaterloo.ca; Ph 519-888-4567 ext. 38790

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See <u>Policy 70</u> and <u>72</u> below for further details.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read <u>Policy 70 - Student Petitions and Grievances</u>, Section 4. When in doubt, please be certain to contact Richard Eibach, the Associate Chair for Undergraduate Affairs who will provide further assistance; <u>reibach@uwaterloo.ca</u>.

Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 - Student Appeals

### Accommodation for Students with Disabilities

Note for students with disabilities: The <u>AccessAbility Services</u> office, located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

### Accommodation for course requirements

- Students requesting accommodation for course requirements (assignments, midterm tests, final exams, etc.) due to illness should do the following:
  - seek medical treatment as soon as possible and obtain a completed uWaterloo Verification of Illness Form
  - $_{\odot}$   $\,$  submit that form to the instructor within 48 hours.
  - (if possible) inform the instructor by the due date for the course requirement that you will be unable to meet the deadline and that documentation will be forthcoming.
- <u>In the case of a missed final exam</u>, the instructor and student will negotiate an extension for the final exam, which will typically be written as soon as possible, but no later than the next offering of the course.
- In the case of a missed assignment deadline, midterm test, or quiz, the instructor will either:
  - waive the course component and re-weight remaining term work as he/she deems fit according to circumstances and the goals of the course, or
  - provide an extension.
- <u>In the case of bereavement</u>, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.
- Students who are experiencing extenuating circumstances should also inform their academic advisors regarding their personal difficulties.

# Official version of the course outline

If there is a discrepancy between the hard copy outline (i.e., if students were provided with a hard copy at the first class) and the outline posted on LEARN, the outline on LEARN will be deemed the official version. Outlines on LEARN may change as instructors develop a course, but they become final as of the first class meeting for the term.