

WESTERN UNIVERSITY
LONDON CANADA

Department of Psychology
Winter 2027

Psychology 3195G Section 001

Special Topics in Cognitive Psychology: Advanced Sensation and Perception

1 Calendar Description

This course builds on Psychology 2115 in exploring how we make sense of sensory data, which is our only source of information about the world. We will integrate findings from neuroanatomy and physiology with psychophysics, perception, and behaviour. The course will introduce you to psychophysical methods and will contain many demonstrations and hands-on experiments.

Antirequisites: n/a

Prerequisites: Both [Psychology 2801F/G](#) (or one of [Health Sciences 2801A/B](#), [Psychology 2840F/G](#), [Psychology 2855F/G](#)) and [Psychology 2811A/B](#) (or one of [Biology 2244A/B](#), [Economics 2122A/B](#), [Economics 2222A/B](#), [Geography and Environment 2210A/B](#), [Health Sciences 3801A/B](#), [MOS 2242A/B](#), [Psychology 2830A/B](#), [Psychology 2850A/B](#), [Sociology 2205A/B](#), [Statistical Sciences 2035](#), [Statistical Sciences 2141A/B](#), [Statistical Sciences 2143A/B](#), [Statistical Sciences 2244A/B](#), [Statistical Sciences 2858A/B](#), the former [Social Work 2207A/B](#)), or the former [Psychology 2820E](#) or both the former [Psychology 2800E](#) and the former [Psychology 2810](#), and [Psychology 2115A/B](#). Minimum grade of 60% required in all prerequisite courses.

3 lecture hours; Course Weight: 0.

Unless you have either the prerequisites for this course or written special permission from your Dean to enrol in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2 Course Information

Instructor:	Ingrid Johnsrude
Office & Phone:	SSC 6400
Office Hours:	By appointment
Email:	ijohnsru@uwo.ca

Teaching Assistant: [TA information]
Office: [TA information]
Office Hours: [TA information]
Email: [TA information]

Time and Location of Classes: Thursday 1.30 – 4.30, UCC-59

For courses that include an online component, students must have a reliable internet connection and computer that are compatible with online learning system requirements.

3 Course Materials

There is no textbook for this course. Weekly readings will come from websites, individual chapters made available on OWL, and journal articles posted to OWL.

4 Course Objectives and Learning Outcomes

Learning Outcome	Learning Activity	Assessment
Depth and Breadth of Knowledge Extend knowledge of perceptual systems	Lectures, readings and in-class activities	Assignments, reports, final exam
Knowledge of Methodologies Increase knowledge of psychophysical and related methods	Lectures, readings, in-class activities	Assignments, reports, final exam
Application of Knowledge Able to design a study or experiment	In-class activities	Assignments, final exam
Communication Skills Able to describe a study or experiment, and to analyse and present data, and draw suitable conclusions	Readings	Assignments and lab reports
Awareness of Limits of Knowledge Able to critically assess primary literature	Reading primary literature	Successful incorporation into assignments and reports

5 Evaluation

The evaluation and testing formats for this course were created to assess the learning objectives as listed in section 4 and are necessary for meeting these learning objectives.

Assignments: 15%

Lab participation and reports: 60%

Final exam: 25%

There is no midterm exam.

Policy on Missing Coursework

You must attend class in order to complete the associated assignment/lab report. Absence from class will mean that you will not be able to hand in the relevant assignment/lab report.

Assignments: Your four out of five highest assignment marks will count towards your final grade. Late submissions will not be accepted.

Lab participation and reports: The lab worth 20% (2 weeks in class plus writeup) is a **designated assessment** and thus requires formal supporting documentation for an absence to be accepted (academic consideration). An absence from this component cannot be undocumented. For labs worth 10%, your three out of four highest lab marks will count towards your final grade. Late submissions will not be accepted.

Final exam: With formal supporting documentation, a student who misses the exam during the April exam period will be offered a makeup exam in May.

Because this is an essay course, as per Senate Regulations, you must pass the essay component to pass the course. That is, the average mark for your written assignments must be at least 50%.

This course is exempt from the Senate requirement that students receive assessment of their work accounting for at least 15% of their final grade at least three full days before the date of the deadline for withdrawal from a course without academic penalty.

The Psychology Department follows Western's grading guidelines:

https://www.uwo.ca/univsec/pdf/academic_policies/general/grades_undergrad.pdf

The expectation for course grades within the Psychology Department is that they will be distributed around the following averages:

70%	1000-level to 2099-level courses
72%	2100-2999-level courses
75%	3000-level courses
80%	4000-level courses

In the event that course grades are significantly higher or lower than these averages, instructors may be required to make adjustments to course grades. Such adjustment might include the normalization of one or more course components and/or the re-weighting of various course components.

Policy on Grade Rounding

Please note that although course grades within the Psychology Department are rounded to the nearest whole number, no further grade rounding will be done. No additional assignments will be offered to enhance a final grade; nor will requests to change a grade

because it is needed for a future program be considered.

6/7 Class, Assessment/Evaluation Schedule

Date	Lecture	Activity	Assignment	Assignment Due	Value (% of final mark)
07-Jan	Introduction	Small group icebreaker	N/A	N/A	
14-Jan	What is perception?	Out of body experiences: Alien hands and sensory conflict	Worksheet 1	21-Jan	3
21-Jan	Signals and filters	Discovering sound/Filter detective	Worksheet 2	28-Jan	3
28-Jan	Vision	Discovering your own eyes	Worksheet 3	04-Feb	3
04-Feb	Relating the physics of a stimulus to its sensation	Magnitude estimation	Worksheet 4	11-Feb	3
11-Feb	Signal Detection Theory and Psychophysics	Visit to the WIRB: Pure Tone Audiometry	Worksheet 5	25-Feb	3
18-Feb	READING WEEK				
25-Feb	Psychophysics II	Thresholds	Mini lab report 1	25-Feb	10
04-Mar	Hearing	Signal Detection: Quantifying sensitivity and response bias	Mini lab report 2	04-Mar	10
11-Mar	Colour vision	Colour contrast and constancy	Mini lab report 3	11-Mar	10
18-Mar	Speech perception and production	Learning to understand time compressed speech	Mini lab report 4	18-Mar	10
25-Mar	Spatial hearing	Sound lateralization I	See next week	See next week	
01-Apr	Bayesian perception	Sound lateralization II	Full Lab Report	08-Apr	20
08-Apr	Wrap up and Q&A		NA	N/A	

The final exam will be three hours in length and will be scheduled during the April exam period. It will consist of short answer (one paragraph) and longer-answer (1 page) questions.

8 Academic Integrity

Scholastic offences are taken seriously, and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Possible penalties for a scholastic offence include failure of the assignment/exam, failure of the course, suspension from the University, and expulsion from the University.

Statement on Use of Electronic Devices

All electronic devices are permitted during class; no electronic devices, including smartwatches, will be permitted on your person during the final exam.

Plagiarism Detection Software

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western and Turnitin.com.

Use of AI

The use of generative AI tools such as ChatGPT to produce written work is not permitted unless permission is granted by the instructor for specific circumstances. Any work submitted must be the work of the student in its entirety unless otherwise disclosed. When used, AI tools should be used ethically and responsibly, and students must cite or credit the tools used in line with the expectation to use AI as a tool to learn, not to produce content.

AI Policy for Psychology:

Responsible use of AI is allowed in Psychology. This includes using AI for brainstorming, improving grammar, or doing preliminary/background research on a topic.

AI is **not** to be used in place of critical thinking.

The misuse of AI undermines the academic values of this course. Relying on AI to create full drafts or fabricate sources is prohibited. You are ultimately responsible for any work submitted, so it is highly advised that you critically review your Generative AI output before incorporating this information into your assignments.

If you use AI, you must clearly explain its role in your work. All written assignments will require an AI Usage Statement, in which you will indicate what tools you have used, what you have used them for, and (broadly) how you have modified this information. Assignments without an AI Usage Statement will not be accepted.

Violations of this policy will be handled according to Western's scholastic offense policies.

Multiple Choice Exams

Computer-marked multiple-choice tests and/or exams will be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

9 Academic Accommodations and Accessible Education

View Western's policy on academic accommodations for student with disabilities at this [link](#).

Accessible Education provides supports and services to students with disabilities at Western. If you think you may qualify for ongoing accommodation that will be recognized in all your courses, visit [Accessible Education](#) for more information. Email: aew@uwo.ca Phone: 519 661-2147

10 Absence & Academic Consideration

Academic Considerations:

https://registrar.uwo.ca/academics/academic_considerations/index.html

11 Other Information

- Office of the Registrar: <https://registrar.uwo.ca>
- Student Development Services: www.sdc.uwo.ca
- Psychology Undergraduate Program:
<https://www.psychology.uwo.ca/undergraduate/index.html>

Students who are in emotional/mental distress should refer to Health and Wellness@Western <https://www.uwo.ca/health/> for a complete list of options about how to obtain help.

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you.

If you wish to appeal a grade, please read the policy documentation at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/appealsundergrad.pdf. Please first contact the course instructor. If your issue is not resolved, you may make your appeal in writing to the Undergraduate Chair in Psychology (psyugrd@uwo.ca).

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