

Sensation & Perception

PSYC 215

Winter 2020

Instructor: Dr. Tyson W. Baker
Contact: Tyson.Baker@Queensu.ca
Lectures in Dunning 14: Wednesday 1:00pm-2:20pm
 Friday 11:30am-12:50pm
Office Hours in Humphrey 235: Wednesday 11:00am-1:00pm

Teaching Assistants (TA): Karolina Krzys kjk6@queensu.ca

- Tutorial sections 2, 4, 6, 8

Kevin Zhou kwz1@queensu.ca

- Tutorial sections 3, 5, 7, 9

Jack Parsons jddp@queensu.ca

- Exams & Assignments
- Student Accommodations for exams (not extenuating circumstances or cue sheets)
 - Upload QSAS form to dropbox in OnQ

| | Discussion Forum | Email Me | Email Your TA |
|--|------------------|----------------------------|--|
| Questions about course content , exams , assignments , and tutorials | Yes | | |
| Questions/comments including sensitive information (e.g. extenuating circumstances) | | Yes | If it relates to tutorials. (CC me) |
| Need to meet outside office hours | | Yes | |
| QSAS Accommodations (Upload to dropbox in OnQ first) | | Jack will help you (CC me) | |
| Reviewing exams & assignments | | | Yes (exam review office hours will be announced) |

Course Site

Course material, announcements, and students' grades will be available on [OnQ](#). OnQ will be used to communicate with the class regarding any cancellations, so please be sure to turn on news announcements and check in regularly.

If you have any technical problems, [take a screenshot](#) and check the help menu. If that doesn't work, then email the screenshot and a detailed description of the problem to me and your TA.

Course Description

The course introduces sensory information processing and perception as well as methods used to study the relationship between the physical energy that is sensed (e.g. light and sound) and the subjective experience of objects and events. Mechanisms underlying perception of touch, body position, taste, smell, hearing, and vision are covered.

3 credit hours

Pre-requisites: PSYC 100

Textbook: E. Bruce Goldstein, Sensation and Perception, 10th edition. Thomson/Wadsworth, 2014.
-Available in the [bookstore](#)

Course Content

This schedule is subject to change and is a rough guideline for content. Because these chapters do not fit perfectly into 80-min lectures, I've made this schedule a little faster than I expect to cover the material (You can see midterms a little later than the material on them). If we complete content ahead of schedule, then we will start the subsequent content in the same lecture.

| Date(s) | Lecture Topic | Relevant Readings |
|-------------------|---|--|
| Jan 8 | General Course Introduction | Syllabus |
| Jan 10, 15 | Introduction to Perception | Chapter 1 |
| Jan 17, 22 | The Beginning of the Perceptual Process | Chapter 2 |
| Jan 22, 24 | Neural processing | Chapter 3 |
| Jan 24 | Cortical Organization | Chapter 4 |
| Jan 29 | Perceiving Objects & Scenes | Chapter 5 |
| Jan 31, Feb 5 | Visual Attention Assignment 1 (5%) due Jan 31 11:00pm | Chapter 6 |
| Feb 7 | Midterm 1 (15%) | Chapters 1-5 |
| Feb 11, 14 | Perceiving Colour | Chapter 9 |
| Feb 14 | Perceiving Depth & Size | Chapter 10 |
| <i>Feb 19, 21</i> | <i>No Class: Reading Week</i> | --- |
| Feb 26 | Perceiving Depth & Size | Chapter 10 |
| Feb 28 | (A bit of) Perceiving Motion Assignment 2 (5%) due Feb 28 11:00pm | Chapter 8 |
| Mar 4, 6 | Hearing I: Cochlea & Pitch | Chapter 11 |
| Mar 11 | Midterm 2 (15%) | Chapters 6, 9, 10, 8 |
| Mar 13 | Hearing II: Location & Organization | Chapter 12 |
| Mar 18, 20 | The Cutaneous Senses Assignment 3 (5%) due Mar 27 11:00pm | Chapter 14 |
| Mar 25, 27 | The Chemical Senses | Chapter 15 |
| Apr 1, 3 | Leftovers & Review | |
| Apr 9-25 | Final Exam (30%) to be scheduled by the Examinations Office | All, with an emphasis on 11, 12, 14, 15 |

Please note that the final exam could be scheduled late in the exam period (I have no control over this) and **you are responsible for being available to write the exam at any point in the exam period.** Thus, I STRONGLY advise you to NOT book flights until the exam schedule becomes available!

Grading Scheme and Grading Method

Both midterms will occur during normal class time. Grades will be posted on OnQ. You can meet with your TA to view your exams; details will be posted on OnQ once grading is complete.

| Component | Weight % | Comments | |
|-------------------|-----------------------|--|----------|
| Midterm Exams (2) | 2 x 15% = 30% | Midterm exams are designed to evaluate understanding of the material presented. Students are responsible for all textbook readings and lecture material. There will be 2 75-minute midterm exams during class time. Midterm exams are NOT cumulative and will consist of multiple choice (bring pencils!) and short-answer questions. | |
| Final Exam | 30% | The final exam IS cumulative, but the emphasis will be on material not covered on previous tests. Students are responsible for all textbook readings and lecture material. The final exam will consist of multiple choice (bring pencils!) and short-answer questions. This exam will be scheduled during the formal examination period. | |
| Tutorials (5) | 5 x 5% = 25% | Tutorials are an opportunity to gain in-depth knowledge and think scientifically about selected topics. You will be formulating hypotheses, testing hypotheses, and designing experiments. The format of tutorials may vary, but typically include a topic introduction from your tutorial TA, an activity (e.g. data collection or just experiencing a phenomenon), then time at the end to apply your knowledge in a short assignment. Some tutorials may require you to provide data to your tutorial TA, who will then process the data and return it at a later date to complete your tutorial assignment. Some tutorials may require you to bring and process your own data. Tutorial assignments to be completed independently unless otherwise specified by your tutorial TA. There will be no tutorials the first 2 weeks of class. You must attend the tutorial in which you are registered. | |
| Assignments (3) | 3 x 5% = 15% | Assignments will have students answering research questions or problems posed to them. Compared to tutorials, assignments will emphasise finding, reading, and interpreting peer-reviewed literature related to sensation and perception. Assignments are to be completed independently. | |
| Tutorial Section | Time | Dates ALL IN JOHN WATSON 401 | TA |
| 002 | Friday 1:00-2:30pm | Jan 24, Feb 7, Mar 6, 20, Apr 3 | Karolina |
| 003 | Tuesday 8:30-10:00am | Jan 21, Feb 4, Mar 3, 17, 31 | Kevin |
| 004 | Monday 10:00-11:30am | Jan 20, Feb 3, Mar 2, 16, 30 | Karolina |
| 005 | Monday 8:30am-10:00am | Jan 20, Feb 3, Mar 2, 16, 30 | Kevin |
| 006 | Friday 1:00-2:30pm | Jan 31, Feb 14, 28, Mar 13, 27 | Karolina |
| 007 | Tuesday 8:30-10:00am | Jan 28, Feb 11, 25, Mar 10, 24 | Kevin |
| 008 | Monday 10:00-11:30am | Jan 27, Feb 10, 24, Mar 9, 23 | Karolina |
| 009 | Monday 8:30am-10:00am | Jan 27, Feb 10, 24, Mar 9, 23 | Kevin |

All components of this course will receive numerical marks that will be summed to produce your course total. Only your course total will be rounded according to mathematical convention. Your rounded course total will be converted to a letter grade according to Queen’s Official Grade Conversion Scale:

| Grade | Numerical Course Average (Range) |
|-------|----------------------------------|
| A+ | 90-100 |
| A | 85-89 |
| A- | 80-84 |
| B+ | 77-79 |
| B | 73-76 |
| B- | 70-72 |
| C+ | 67-69 |
| C | 63-66 |
| C- | 60-62 |
| D+ | 57-59 |
| D | 53-56 |
| D- | 50-52 |
| F | 49 and below |

Bonus Marks

Students may earn up to 3% in bonus marks. See the end of the syllabus for details; it is a long standard statement that doesn’t fit well right here.

Tips for Success!

Ask questions during lectures! If something is unclear to you or you have another question, chances are there are other students thinking the same thing. It makes lectures so much more enjoyable and allows everyone to benefit from your questions.

Study as frequently as possible; there is a massive amount of literature demonstrating that frequent studying is far superior to infrequent studying even when total study time is the same. **The most efficient minutes to study are right before lecture** because you can review the material from the last lecture that often continues into the oncoming lecture. An added bonus is that I’m right here if you have any questions. In the “General Introduction” I will go through some methods to increase study efficiency; it’s worth using them! If you think reading is studying, check out those methods.

Please make use of the discussion board on OnQ for course-related content. Email your TA and myself (on the same email) if you have any questions unsuitable for the discussion board (e.g. personal information). Some concepts are best explained in-person, so just drop into my office hours (you don’t need an appointment; I’ll be there). If you would like to meet but cannot make it to my office hours, email me with the reason you cannot attend my office hours and your available times for the next 5-7 days and I’ll reply with the first time our schedules match.

Location and Timing of Final Examinations

The exam dates for each Term are listed on the Faculty of Arts and Science webpage under “[Important Dates](#).” Student exam schedules for the Fall Term are posted via SOLUS immediately prior to the Thanksgiving holiday; for the Winter Term they are posted on the Friday before Reading Week, and for the Summer Term they are individually noted on the Arts and Science Online syllabi. **Students should delay finalizing any travel plans until after the examination schedule has been posted. Exams will not be moved or deferred to accommodate employment, travel/holiday plans or flight reservations.** Also, as indicated in Academic Regulation 8.3, students must write all final examinations in all on-campus courses on the Kingston campus.

Academic Considerations for Students in Extenuating Circumstances

Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances that are beyond their control and are interfering with their ability to complete academic requirements related to a course for a short period of time, not to exceed three months. Students receiving academic consideration must meet all essential requirements of a course. The Senate Policy on Academic Consideration for Students in Extenuating Circumstances was approved at Senate in April, 2017.

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. Arts and Science undergraduate students can find the Faculty of Arts and Science protocol and the portal where a request can be submitted here. Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

If you need to request academic consideration for this course, you will be required to provide the name and email address of the instructor/coordinator. Please use the following:

<https://www.queensu.ca/artsci/undergrad-students/academic-consideration-for-students>

Instructor/Coordinator Name: Tyson Baker

Instructor/Coordinator email address: Tyson.Baker@Queensu.ca

For **tutorials** (or tutorial assignments requiring your data) missed due to extenuating circumstances, the missed grade will be replaced with the mean of the other tutorials. For tutorials missed NOT due to extenuating circumstances, the grade is 0. Tutorial assignments not requiring your data are treated like assignments.

For **assignments** that are late due to extenuating circumstances, an extension will be given matching the duration that of the extenuating circumstances.

- If extenuating circumstances are 72 hrs, then a 72-hr extension will be granted.
- If extenuating circumstances last 7 days, then a 7-day extension will be granted, and so on.
 - If an assignment is not completed by the final exam, it's worth will be added to the final exam
- For assignments that are late NOT due to extenuating circumstances, 10% will be subtracted daily from the assignment and no assignments later than 10 days will be accepted. Thus, an assignment that would have earned 3.2/5 but was 2 days late (-20%) would earn 2.2/5. Late penalties are applied daily, starting at the due time. Note that the due time is the cut-off, not the time you ought to submit at.

For **midterm exams** missed due to extenuating circumstances, students will write an alternate midterm exam in the last few weeks of the course. If students miss the alternate midterm exam due to extenuating circumstances, I will prorate the exam with the final exam grade. For midterm exams missed NOT due to extenuating circumstances, I will prorate the exam as half the final exam grade.

For **final exams** missed due to documented extenuating circumstances, we follow departmental policies: <http://www.queensu.ca/psychology/undergraduate/current-students/departmental-policies>

Students who cannot write an exam during the December or April exam period due to a serious, extenuating circumstance (illness, death in the family) must follow the steps below to be eligible to write a deferred exam during the PSYC department's **Make up Exam period** in January, April/May, and September.

1. Apply for academic consideration using the Faculty of Arts and Science Portal: <http://www.queensu.ca/artsci/accommodations>
2. As soon as possible, follow up with your instructor(s) either by email or in-person to discuss your academic consideration request
3. If your request for a deferred exam is approved, be available to write the makeup exam the PSYC department's **Make up Exam period** in January, April/May or September, or receive '0' on the exam.
4. Complete and return the instructor-signed [Permission for an Incomplete Grade](#) (PDF, 256 KB) form available on the Arts and Science website, and return to the Undergraduate Office.

NOTE: Students who do not write the makeup exam are advised to drop the course. If a student cannot write the makeup exam due to a serious extenuating circumstance for which they can provide new documentation, they will either be granted a second deferral by their instructor or be supported in their appeal to drop the course after the deadline though this decision rests with the Associate Dean (Studies).

If a student has completed <50% of the course by the end of the scheduled final exam due to extenuating circumstances, then they will be advised to drop the class after the deadline as per academic regulation 10.3.4.

Accessibility

Queen's is committed to an inclusive campus community with accessible goods, services, and facilities that respect the dignity and independence of persons with disabilities. PSYC 271 is available in an accessible format or with appropriate communication supports upon request. Please contact me for support.

Accommodations for Disabilities

Students with accommodations must upload their accommodations form as an "assignment" in OnQ. Jack Parsons will coordinate Psyc 271 exam accommodations.

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at Senate in November 2016 (see <https://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslclwww/files/files/policies/senateandtrustees/ACADACCOMMPOLICY2016.pdf>). If you are a student with a disability and think you may need academic accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website at: <http://www.queensu.ca/studentwellness/accessibility-services/>

Technology in our Classroom

Use of electronic devices within the classroom must be class-relevant and sound/vibration must be turned off. Contact me before class if you require special consideration.

Intended Student Learning Outcomes

- Describe how sensory information is transcribed into neural activity, and compare and contrast the transduction process across several senses.
- Distinguish the types of information available in the sensory input, and how the brain can work on this information.
- Discriminate between the physical properties of a stimulus and the perception of that stimulus.
- Identify when sensory illusions provide insights into the perceptual process, and when available, provide a neural explanation for those illusions.

Academic Integrity

Queen's students, faculty, administrators and staff all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see www.academicintegrity.org) and by the quality of courage. These values and qualities are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities <https://www.queensu.ca/secretariat/policies/senate/report-principles-and-priorities>).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments and their behaviour conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1 <http://www.queensu.ca/artsci/academic-calendars/regulations/academic-regulations/regulation-1>), on the Arts and Science website (see <https://www.queensu.ca/artsci/students-at-queens/academic-integrity>), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Copyright

This material is copyrighted and is for the sole use of students registered in the PSYC 215 course. This material shall not be distributed or disseminated to anyone other than students registered in the PSYC 215 course. Failure to abide by these conditions is a breach of copyright, and may also constitute a breach of academic integrity under the University Senate's Academic Integrity Policy Statement.

Turnitin Statement

This course makes use of Turnitin, a third-party application that helps maintain standards of excellence in academic integrity. Normally, students will be required to submit their course assignments to through onQ to Turnitin. In doing so, students' work will be included as source documents in the Turnitin reference database, where they will be used solely for the purpose of detecting plagiarism.

Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. Turnitin compares submitted files against its extensive database of content, and produces a similarity report and a similarity score for each assignment. A similarity score is the percentage of a document that is similar to content held within the database. Turnitin does not determine if an instance of plagiarism has occurred. Instead, it gives instructors the information they need to determine the authenticity of work as a part of a larger process.

Please read Turnitin's Privacy Pledge, Privacy Policy, and Terms of Service, which governs users' relationship with Turnitin. Also, please note that Turnitin uses cookies and other tracking technologies; however, in its service contract with Queen's Turnitin has agreed that neither Turnitin nor its third-party partners will use data collected through cookies or other tracking technologies for marketing or advertising purposes. For further information about how you can exercise control over cookies, see Turnitin's Privacy Policy.

Turnitin may provide other services that are not connected to the purpose for which Queen's University has engaged Turnitin. Your independent use of Turnitin's other services is subject solely to Turnitin's Terms of Service and Privacy Policy, and Queen's University has no liability for any independent interaction you choose to have with Turnitin.

Participant Pool (Volunteer Research Participation)/FAQ

In this course you can earn bonus points by participating in the Psychology Research Participant Pool. For every half hour of research completed, you can increase your final mark in this course by 0.5% up to a maximum of 3%. If you are enrolled in more than one eligible course, you will select the course toward which your research participation will be credited when you sign up for a study. You can complete studies toward each course. You cannot apply the same study credit to more than one course, and research credit cannot be used to improve a failing mark to a passing mark. The last day to participate in research for bonus credit is the last day of classes. For more details, please see the information posted at the [Psychology Participant Pool page on the Department website](#).

All students will be activated in the participant pool by the 3rd week of the term. If you have previously used the participant pool, you will use the same userid and password that you used previously. If you are new to the participant pool, you will receive an email with your login information by the 3rd week of class.

During the first week of the semester, you will be emailed a link to an online prescreening questionnaire that will be due by the end of the Add/Drop period (second Friday of the term). If you complete the larger prescreening questionnaire online, you may become eligible for additional studies, and those researchers will contact you directly to find a time to participate.

Participation in research is entirely voluntary. If you want to earn credit but don't want to participate in a particular study, you can complete an alternative assignment instead. For the alternative assignment, researchers either will offer a walk-through of their experiment, or they will have you to read an article

or blog post, listen to a short podcast, or watch a short video and then answer questions about it. To complete an alternative assignment, you must contact **the principal investigator** of a particular study (see the study's contact information on SONA for their email) before the last week of classes for the semester to complete the alternative assignment option. Although the length of studies will vary, all alternative assignments will last approximately 30 minutes, so you will earn 0.5% for each alternative assignment that you complete.

Off-campus students: please note that you can participate in online studies and researchers who offer these studies also offer online alternative assignments.

Please note: we understand that life happens and you may be unable to attend the session you sign up for as a result of extenuating circumstances. If you are unable to attend your scheduled session due to an extenuating circumstance, please contact the researcher directly to reschedule the session and/or receive an "excused no-show" notation. An "excused no-show" is guaranteed if you contact researchers 3 or more hours in advance of your appointment.

Research is an important activity that directly impacts science and society, and that also impacts a larger system (e.g., time in lab space is very limited and can be costly—for example, booking a 1 hour session in the fMRI facility costs \$400). We thank you in advance for ensuring that you attend your scheduled sessions, and that you follow up with the researcher as soon as possible if you miss a session due to extenuating circumstances. However, if you reach 2 *unexcused* no-shows in a given semester, you will not be able to sign up for additional studies/alternative assignments that semester. You will be automatically granted the ability to sign up for studies to earn research credit the following academic semester.

Note that your course instructor is not involved in the administration of studies and alternative assignments. If you have questions about studies, please contact the researchers listed on SONA. Questions about the pool (e.g., credits, prescreening) should be directed to the participant pool coordinator at participant.pool@queensu.ca.