

Brain & Behaviour I

PSYC 271

Fall 2018

Instructor: Dr. Tyson W. Baker
Contact: Tyson.Baker@Queensu.ca
Lectures in Biosciences Auditorium: Tuesday 1:00pm-2:30pm
Thursday 11:30am-1:00pm
Office Hours in Humphrey 235: Tuesday 2:30pm-3:00pm
Thursday 1:00pm-2:30pm

Teaching Assistant (TA): Lindsey Yessick
Contact: Lindsey.Yessick@Queensu.ca
Office Hours: See OnQ news and by appointment

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. I highly-encourage using the discussion board for class-related content.

Revel is the electronic textbook *Biopsychology* that comes with quizzes. Detailed login instructions are posted on OnQ. 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

An introduction to behavioural neuroscience. The course primarily focuses on the basics of neuronal operation, functional neuroanatomy, neuropharmacology, and behavioral neuroscience methods. This will be followed by an examination of input (sensory) and output (motor) systems of the brain. Finally, topics relevant to lateralization of function and language will be covered.

3 credit hours

Pre-requisites: PSYC 100

Textbook: John P.J. Pinel & Steven J. Barnes. *Biopsychology*. 10th Edition. Pearson.

- Revel is the online e-text with quizzes
 - Available in the bookstore
 - Hardcopies are only available by ordering through Revel
- 8th or 9th editions are acceptable.
- Also used for Psyc 370

Course Content

This schedule is subject to change and is a rough guideline for content. If we complete content ahead of schedule, then we will start the subsequent content in the same lecture, like I have scheduled for Chapters 1/2, 4/5, and 7/8.

This year, I will incorporate as much of Chapter 5 (Research Methods) into other sections as I can. This will place the methods in better context and lighten the research methods chapter.

(Date)	Topic	Relevant Readings
Sept 6	General Course Introduction	This syllabus
Sept 11, 13	Introduction to Biopsychology	Chapter 1
Sept 13, 18, 20	Evolution, Genetics, & Experience	Chapter 2
Sept 25, 27	Anatomy of the Nervous System	Chapter 3
Oct 2	Midterm Exam 1 (30%)	Chapters 1-3
Oct 4, 9, 11	Neural Conduction and Synaptic Transmission	Chapter 4
Oct 11, 16, 18	The Research Methods of Biopsychology	Chapter 5
Oct 23	Perception: The Visual System	Chapter 6
Oct 25	Fall Break: No Classes	---
Oct 30	Perception: The Visual System	Chapter 6
Nov 1	Midterm Exam 2 (30%)	Chapters 4-6
Nov 6, 8, 13	Perception: Hearing, Touch, Smell, Taste, Attention	Chapter 7
Nov 13, 15, 20	The Sensorimotor System	Chapter 8
Nov 22, 27	Learning, Memory, and Amnesia	Chapter 11
Nov 29	Leftovers & Review	All
Dec 7-17	Final Exam (40%) to be scheduled by the Examinations Office	All, with an emphasis on 7,8, 11

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 Exam 1 Midterm Exam 2	30% 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	40%	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.

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. Incorporating tests into the same amount of study time increases learning, so use Revel as a study aid.

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 in to 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

As noted in Academic Regulation 8.2.1, “the final examination in any class offered in a term or session (including Summer Term) must be written on the campus on which it was taken, at the end of the appropriate term or session at the time scheduled by the Examinations Office.” The exam period is listed in the key dates prior to the start of the academic year in the Faculty of Arts and Science Academic Calendar and on the Office of the University Registrar’s webpage. A detailed exam schedule for the Fall Term is posted before the Thanksgiving holiday; for the Winter Term it is posted the Friday before Reading Week, and for the Summer Term the window of dates is noted on the Arts and Science Online syllabus prior to the start of the course. 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.

Academic Considerations for Students in Extenuating Circumstances

The Senate Policy on Academic Consideration for Students in Extenuating Circumstances

(<http://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.us/cwww/files/files/policies/senateandtrustees/Academic%20Considerations%20for%20Extenuating%20Circumstances%20Policy%20Final.pdf>)

) was approved in April, 2017. Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances that are beyond their control and which have a direct and substantial impact on their ability to meet essential academic requirements. 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 they submit a request at: <http://www.queensu.ca/artsci/accommodations>. Use Tyson.Baker@Queensu.ca as the course contact email. Students in other Faculties and Schools should refer to the protocol for their home Faculty.

Note: I do not receive notification of requests for academic consideration until a request has been approved by the Faculty Office.

For **midterm exams** missed due to extenuating circumstances, students will write an alternate midterm exam in the last few weeks of the course. For midterm exams missed NOT due to extenuating circumstances, I will prorate the exam as half the weighted mean of the other midterm and final exam.

For **final exams** missed due to 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).

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

Queen's University is committed to achieving full accessibility for persons 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. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact Student Wellness Services (SWS) and register as early as possible. For more information, including important deadlines, please visit the Student Wellness 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

By Midterm Exam 1, students are expected to be able to compare and contrast the subdisciplines of biopsychology and identify their role in converging operations, describe how research on evolution of the human brain has changed over time, define epigenetics, and explain how it is transforming our understanding of genetics, identify and draw parts of the brain and brain cells.

By Midterm Exam 2, students are expected to be able to understand how neurons fire action potentials and communicate with one another and some mechanisms of drug action on these processes, compare and contrast brain imaging techniques, psychophysiological measures of brain activity, psychological and physiological brain measurement and forms of brain manipulation, identify the processes that our visual system uses to turn our physical environment into neural signals and how these neural signals operate.

By the Final Exam, students are expected to be able to identify the processes that our other (non-visual) senses turn our physical environment into neural signals and how these neural signals operate, explain what is meant by a hierarchy of central sensorimotor programs, and explain the importance of this arrangement or sensorimotor functioning (in other words, how we produce behaviours), how the brain acquires, maintains, and loses knowledge

By the end of the course, a student may be able to understand how our biological machinery allows us to convert physical input into sensory experiences, thoughts, and behaviour. At all points, students will be expected to be able to apply knowledge to new real or hypothetical scenarios.

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.

Students are responsible for familiarizing themselves with and adhering to the regulations concerning academic integrity. General information on academic integrity is available at Integrity@Queen's University, along with Faculty or School specific information. Departures from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery and falsification. Actions which contravene the regulation on academic integrity carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

Copyright

This material is copyrighted and is for the sole use of students registered in the PSYC 271 course. This material shall not be distributed or disseminated to anyone other than students registered in the PSYC 271 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.

Privacy

This course makes Revel. Be aware that by logging into the site, you will be leaving OnQ, and accessing Pearson's website and Revel. Your independent use of that site, beyond what is required for the course (for example, purchasing the company's products), is subject to Pearson's terms of use and privacy policy. You are encouraged to review these documents before using the site.

<http://www.pearsoncanada.ca/pearson-canada-at-a-glance/legal/privacy-statement>

Participant Pool (Volunteer Research Participation)/FAQ

Students in this course have the option of volunteering in psychological research being conducted by faculty and advanced students in the Psychology Department. **This is a voluntary activity that is acknowledged by awarding up to 3% bonus marks on your final grade (if you complete 3 hours of research participation).** These bonus marks will be added to your final grade at the end of the year. Note: Research participation cannot improve a failing grade to a pass.

Although participation is not a requirement, we do consider it to be an integral part of the course and encourage students to participate. Students gain valuable direct experience in methods of psychological investigation and contribute to research.

Each study has been reviewed in detail and cleared by the Department's Ethics Review Committee.

Nevertheless, you may decline to participate, for any reason at all, in any study for which you sign up. You may also direct any ethical concerns to the researcher or Participant Pool Officer.

At the conclusion of each study in which you participate, you should be provided with information about the purpose of the study and other relevant details. The idea is to ensure that your participation will

benefit your education, as well as add to the fund of knowledge in psychology. You are encouraged to ask questions about the research in order that you understand fully why the study is being conducted, and what your role is, as a participant.

HOW TO USE THE PARTICIPANT POOL

- **Check your Queen's email.**

Each student will receive an email containing instructions and a password to book appointments using the on-line Participant Pool sign-up system (SONA). **This email will be sent to your Queen's email after the end of the add/drop period (around the 3rd week of Sept).**

In addition, 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 drop/add 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.

- **Sign up for a study**

Signing up for studies is done through the Participant pool website ([click here](#)).

For each ½ hour, or portion thereof, of participation in a study, students will receive 0.5% bonus added to their final grade. The participant pool ends the last day of term.

If you can't find the original email sent to you about the participant pool, just click on the [Participant Pool link](#) and follow the instructions for a forgotten password.

*** When you sign up for a study, you must select the course you want to apply the credit to using the dropdown box. Any unassigned credits may not be counted.

- **App for phone/SONA website**

You can download the SONA app for Apple and Android so that you can manage your signups, see your total credits etc on your phone. See the Psychology Dept webpage for the links (<http://www.queensu.ca/psychology/undergraduate/participant-pool-information>).

You can also manage your participation information on the SONA website. You can view your upcoming timeslots, your total credits etc.

- **Cancel appointments:**

Students will be able to cancel appointments in SONA up to 3 hours prior to their appointment. You must contact the researcher via email if you need to cancel less than 3 hours before your timeslot. Students who do not cancel the appointment and fail to show up will be penalized. The penalty is equal to the credit value for the study that is missed. You will never lose credits already accrued, regardless of the penalty. For example, you could have 3 credits in penalties, but if you have already earned 4 prior credits, you will still receive your 4 marks. You will only have to make up the time for a missed study before additional credits can be earned.

- 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. Researchers of the particular study for which you wish to get credit will administer the alternative assignment (NOT your course instructor -- course

instructors are not involved in the crediting for studies or alternative assignments). You must contact the Principal investigator of a particular study (see the study's contact information on SONA) before the last week of classes for the semester to complete the alternative assignment option. Although the length of studies will vary, the alternative assignment will take approximately 30 minutes, so you will earn 0.5% for each alternative assignment that you complete.

If you have any questions or concerns regarding your participant pool marks, or should you have any ethical or procedural concerns regarding the conduct of an experiment or experimenter, please contact the Participant Pool Officer, Dr. Stanka Fitneva by email at fitneva@queensu.ca or 613.533.2363

FAQ (Frequently Asked Questions)

I'm having difficulty logging in to the Participant Pool to register for a study.

Please go to the Psyc Dept website, click on the Undergraduate drop down to go to Quick Links (in the bottom right corner), click on Participant pool information and click the '[Forgot your password?](#)' option.

Once you click on this link, type in your Queen's email address and you will be sent instructions on how to reset your password so you can log in to the [PSYC 100 Participant Pool website.](#)

I want to be removed from the prescreen emailing list. Who do I contact?

If you no longer want to be contacted by researchers recruiting participants, email Dr. Lee Fabrigar at fabrigar@queensu.ca to request that your name be removed from the prescreening lists.

I completed a study through the Participant Pool but haven't received my credit. Who should I contact?

Please email the Participant Pool Coordinator, [Cheryl Hamilton](#), stating your name, student number, the name of the study, and the date you completed it.

For other FAQs, please visit the main Participant Pool website on the dept of Psychology webpage. (click [HERE](#)).