

Brain & Behaviour I

PSYC 271

Fall 2022

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 learning and memory formation will be covered.

3.0 credit hours

Pre-requisites: PSYC 100

Instructor:

Scott D. Squires, M.Sc.

Contact:

s.squires@queensu.ca

Lectures in Biosciences 1101:

Monday 4:00pm – 5:20pm

Wednesday 2:30pm – 3:50pm

Office Hours in Craine 204:

Tuesday 3:00pm – 4:00pm

Thursday 3:00pm – 4:00pm

Teaching Assistants (TAs):

Halla Abdul-Rahman (Lead TA; halla.abdulrahman@queensu.ca)

Shokouh Abolhosseini (s.abolhosseini@queensu.ca)

Louis Chitiz (louis.chitiz@queensu.ca)

Maeve McCreary (mkm16@queensu.ca)

Yijun Xu (y.xu@queensu.ca)

TA Office Hours:

See OnQ announcements and by appointment

Important University Dates

Sep 1 – Tuition due

Sep 6 – First day of classes

Sep 19 – Last day to add courses

Sep 19 – Last day to drop courses without financial penalty

Nov 1 – Last day to drop courses without academic penalty

Nov 7 – Last day to submit exam accommodation requests (if applicable)

Dec 5 – Last day of classes

Dec 8 - 22 – Exam period

Land Acknowledgement

Queen's University is situated on traditional Anishinaabe and Haudenosaunee Territory. To acknowledge this traditional territory is to recognize its longer history, one predating the establishment of the earliest European colonies. It is also to acknowledge this territory's significance for the Indigenous peoples who lived, and continue to live, upon it – people whose practices and spiritualities were tied to the land and continue to develop in relationship to the territory and its other inhabitants today. The Kingston Indigenous community continues to reflect the area's Anishinaabek and Haudenosaunee roots. There is also a significant Métis community and there are First Peoples from other Nations across Turtle Island present here today.

Equity Statement

Queen's University recognizes that the values of equity and diversity are vital to and in harmony with its educational mission and standards of excellence. It acknowledges that direct, indirect, and systemic discrimination exists within our institutional structures, policies, and practices and in our community. These take many forms and work to differentially advantage and disadvantage persons across social identities such as race, ethnicity, disability, gender identity, sexual orientation, faith, and socioeconomic status, among other examples.

Course Learning Outcomes

1. Summarize the foundations of biopsychology including evolution, neuroanatomy, and neuropharmacology.
2. Describe the process of neural communication.
3. Outline primary research methods in biopsychology.
4. Recall and recognize sensory processing in visual, auditory, olfactory, taste, and somatosensory systems.
5. Relate motor system function to sensory processing in humans.
6. Explain the neural mechanisms of learning and memory.

Course Website

Course material, announcements, and students' grades will be available on [OnQ](#). OnQ will be used to communicate with the class regarding any cancellations or changes to the timeline, so please be sure to turn on news announcements and check in regularly. I highly encourage using the discussion board for class-related content. Quizzes and uploading assignments will be through OnQ as well.

If you have any technical problems with OnQ, take a screenshot of the problem and consult OnQ's help menu for guidance. If the help menu is unable to assist with your problem, send the screenshot along with a detailed description of the situation to Halla and myself and we will try our best to help you out.

Textbook

John P.J. Pinel & Steven J. Barnes. *Biopsychology. 11th Edition*. Pearson.

- Revel is the online e-text with practice quizzes and other study aids
- Available in the [bookstore](#)
- Hardcopies are only available by ordering through Pearson
- 9th and 10th editions are acceptable (but you're still responsible for 11th edition material).
- Also used for PSYC 370

REVEL

It's time to access Revel Biopsychology, 11e, the course materials for PSYC 271 - Brain & Behaviour I. When you're ready, join your course at: <https://console.pearson.com/enrollment/uexc6p>

If you need help, check out these Revel student resources:
<https://www.pearsonhighered.com/revel/students/support/>

Revel is fully digital, highly engaging, and gives you everything you need for your course—all in one continuous, integrated learning experience. Highlighting, note taking, practice questions, digital interactives, and a glossary let you read and study however you like (even offline from your mobile device with the Revel app). Watch this video to learn more:

What is Revel? (<https://youtu.be/hKTleWSfW8>)

All quizzes, tests, assignments, etc. on Revel are considered OPTIONAL (they will not count towards your grades), but they are recommended for practice to help you study.

Third Party Policy

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

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

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	20%	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 Exam 2	25%	Midterm exams are NOT cumulative and will consist of multiple choice (bring pencils!) and short-answer questions.
Final Exam	35%	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.

Quizzes	5% (5x1%)	Each chapter (excluding chapter 1) will have a quiz in OnQ that will close before we begin that chapter in lecture. These quizzes are for mastery: they are open-book, unlimited time, unlimited attempts, and only perfect attempts (10/10) will earn 1%. Imperfect attempts or no attempt will earn 0%. The best 5 of 8 quizzes for each student will be used, so there will be no quiz extensions. Questions are based on the textbook readings. Although quizzes are open-book, you must complete them independently.
Assignments	10% (5x2%)	Each chapter (excluding chapter 1) will have a short assignment (~250 words) that will require students to explain and apply concepts from class. Like the quizzes, the best 5 of 8 assignments will be used (each worth 2%), so no extensions will be given. Specific assignments are to be announced, and they may include explaining how a specific drug works, proposing biopsychological research, or summarizing content from class and extending that content to new questions. Assignments are to be uploaded to OnQ. Detailed instructions will be posted to OnQ.
Online Discussion Participation	5%	Students are encouraged to make use of the online discussion board to ask questions and answer other students' questions. To motivate this, a grade out of 5% will be given to each student at the end of the course based on their level of engagement and thoughtfulness in online discussions.

Bonus Marks: Students may earn up to 3% in bonus marks by participating in psychological research. Please see the end of the syllabus for details.

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. The final grade you receive for the course will be derived by converting your numerical course average 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

Course Timeline

This schedule is subject to change and is a rough guideline for content. Chapters don't fit perfectly into 80-min lectures, so when we complete one chapter, then we will begin the subsequent chapter in the same lecture. You'll see the same date for 2 chapters below when this is planned. 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 a little bit.

Lecture and Exam Timeline:

Date	Topic	Relevant Readings
Sept 7	General Course Introduction	This syllabus
Sept 12, 14	Introduction to Biopsychology	Chapter 1
Sept 14, 19, 21	Evolution, Genetics, & Experience	Chapter 2
Sept 21, 26	Anatomy of the Nervous System	Chapter 3
Sept 28	Midterm Exam 1 (20%)	Chapters 1-3
Oct 3, 5	Neural Conduction and Synaptic Transmission	Chapter 4
Oct 10, 12	<i>Fall Break: No Classes</i>	---
Oct 17	Neural Conduction and Synaptic Transmission	Chapter 4
Oct 17, 19, 24, 26	The Research Methods of Biopsychology	Chapter 5
Oct 26, 31, Nov 2	The Visual System	Chapter 6
Nov 7	Midterm Exam 2 (25%)	Chapters 4-6
Nov 9, 14, 16, 21	Other Sensory Systems, Perception, and Attention	Chapter 7
Nov 21, 23, 28	The Sensorimotor System	Chapter 8
Nov 28, 30	Learning, Memory, and Amnesia	Chapter 11
Nov 30	Leftovers & Review	All
Dec 8-22	Final Exam (35%) to be scheduled by the Examinations Office	All, with an emphasis on 7, 8, 11

Quiz and Assignment Timeline:

Date	Quiz/Assignment	Relevant Readings
Sept 14	Quiz 1 Closes (beginning of class)	Chapter 2
Sept 21	Quiz 2 Closes (beginning of class)	Chapter 3
Sept 29	Assignment 1 Due (11:59pm)	Chapter 2
Oct 3	Quiz 3 Closes (beginning of class)	Chapter 4
Oct 5	Assignment 2 Due (11:59pm)	Chapter 3
Oct 17	Quiz 4 Closes (beginning of class)	Chapter 5
Oct 24	Assignment 3 Due (11:59pm)	Chapter 4
Oct 26	Quiz 5 Closes (beginning of class)	Chapter 6
Nov 2	Assignment 4 Due (11:59pm)	Chapter 5
Nov 9	Quiz 6 Closes (beginning of class)	Chapter 7
Nov 14	Assignment 5 Due (11:59pm)	Chapter 6
Nov 21	Quiz 7 Closes (beginning of class)	Chapter 8
Nov 24	Assignment 6 Due (11:59pm)	Chapter 7
Nov 28	Quiz 8 Closes (beginning of class)	Chapter 11

Nov 30	Assignment 7 Due (11:59pm)	Chapter 8
Dec 7	Assignment 8 Due (11:59pm)	Chapter 11

Suggested Time Commitment

In this course, you should expect to invest on average 8 to 10 hours per week. This will include the time you spend in class, studying course material, and completing assignments, quizzes, and exams. You are encouraged to use a weekly study schedule (visit <https://sass.queensu.ca/resources/online/exams>) to avoid ‘cramming’. This way you will be more likely to complete the course successfully and remember what you learned for longer.

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. 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.

Questions About the Course and Contacting the Teaching Team

The teaching team’s contact information can be found on this syllabus as well as on OnQ. Questions about course structure (e.g., timeline, assessments, etc.) should be posted to OnQ on the “Course Structure” discussion board, to be answered by the lead TA or myself. Questions about course content should be posted to OnQ on the “Student Questions About Course Content” discussion board, to be answered by a TA if not answered by another student first.

If you need to contact one of the TAs or myself outside of OnQ, please send us an email from your Queen’s email address with “PSYC 271” in the subject line. Please allow 24-48 hours for email replies. Please only contact the TA you’ve been assigned to based on your last name (see TA information at top of syllabus to find your TA).

If the discussion board and email correspondence is not giving you the answer you need, please come to my office hours to ask your question(s).

Course Feedback

At various points during the course, students may be asked to take part in a variety of feedback activities (such as questionnaires and exit tickets).

This feedback enables the team to make any adjustments necessary to improve the online learning environment. Additional student feedback will be sought throughout the course. All surveys are anonymous, and directly related to activities, assessments, and other course material.

Academic Considerations for Students in Extenuating Circumstances

Academic consideration is a process for the university community to provide a compassionate response to assist students experiencing unforeseen, short-term extenuating circumstances that may impact or impede a student’s ability to complete their academics. This may include but is not limited to:

- Short-term physical or mental health issues (e.g., stomach flu, pneumonia, COVID diagnosis, vaccination, etc.)

- Responses to traumatic events (e.g., Death of a loved one, divorce, sexual assault, social injustice, etc.)
- Requirements by law or public health authorities (e.g., court date, isolation due to COVID exposure, etc.)

Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances. For more information, please see the [Senate Policy on Academic Consideration for Students in Extenuating Circumstances](#).

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](#). Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

For guidance on **submitting requests**, please refer to the Resource Guides available on the [Academic Consideration website](#) under "Applying for Academic Consideration."

N.B: The COVID-19 pandemic is an evolving situation. If you have symptoms or are deemed a close contact of someone with COVID, please access our **COVID-Related Absence Reference Guide** on the [Academic Consideration website](#). This guide will provide you with information on applying for consideration, the types of documentation (including non-medical documentation) you can use to support your request, as well as insight into how the Faculty office will assess these requests.

If you need to request academic consideration for this course, you will be required to provide the following name and email address to ensure it reaches our team accordingly:

Instructor Name: Scott Squires
Instructor Email Address: s.squires@queensu.ca

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their Professors/Course Coordinators as soon as possible once Consideration has been verified. Any delay in contact may limit the Consideration options available.

Please follow up with me and Halla via email within two days of receiving verification of your Consideration request.

For more information on the Academic Consideration process, what is and is not an extenuating circumstance, and to submit an Academic Consideration request, [please see our website](#).

For **midterm exams** missed due to extenuating circumstances, students will write an alternate midterm exam. 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).

For **quizzes and assignments** missed, the grade will be zero. No extensions will be granted on quizzes and assignments, even in the case of extenuating circumstances. We only count the top 5 of 8 quizzes/assignments to account for extenuating circumstances.

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 and Accommodations for Disabilities

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.

Netiquette

In any course you often communicate with your peers and teaching team through electronic communication. You are expected to use the utmost respect in your dealings with your colleagues or when participating in activities, discussions, and online communication. Here is a list of netiquette guidelines. Please read them carefully and use them to guide your communication in this course and beyond.

1. Make a personal commitment to learn about, understand, and support your peers.
2. Assume the best of others and expect the best of them.
3. Acknowledge the impact of oppression on the lives of other people and make sure your writing is respectful and inclusive.
4. Recognize and value the experiences, abilities, and knowledge each person brings.
5. Pay close attention to what your peers write before you respond. Think through and re-read your writings before you post or send them to others.
6. It's ok to disagree with ideas, but do not make personal attacks.
7. Be open to being challenged or confronted on your ideas and to challenging others with the intent of facilitating growth. Do not demean or embarrass others.
8. Encourage others to develop and share their ideas.

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 (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

Unless otherwise stated, the material on the course website is copyrighted and is for the sole use of students registered in PSYC 271. The material on the website may be downloaded for a registered student's personal use but shall not be distributed or disseminated to anyone other than students registered in this course.

Turnitin Statement

This course uses Turnitin, a third-party application that helps maintain standards of excellence in academic integrity. Normally, students will be required to submit their course assignments 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 to detect 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 select the authenticity of work as a part of a larger process.

Please read [Turnitin's Privacy Pledge, Privacy Policy, and Terms of Service](#), which govern 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.

Privacy Statement

This course makes use of 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>

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. Incorporating tests into your study time increases learning, so use Revel practice quizzes 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 feel free to drop by my office hours if you'd like such an explanation (you don't need an appointment). If you would like to meet but cannot make it to my office hours, email me with the reason you cannot attend them and your available times for the next week and I'll reply with options for times to meet.

Participant Pool (Volunteer Research Participation) Information

Students in this course have the option of volunteering in psychological research conducted by faculty and advanced students in the Psychology Department. 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 [Departmental Participant Pool website](#).

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 sign up for studies

We use the website [Sona](#) for the participant pool. All students will be activated in the participant pool in the 3rd week of classes. 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 during 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.

If you are in multiple 2nd year PSYC courses that use the participant pool, you must assign your credits to a particular course. For example, if you are in PSYC 271 you can have 3 credits assigned to it. If you have 4 credits assigned to that course, the extra credit won't count unless it's applied to another course. If you have credits assigned to the incorrect courses, please contact participant.pool@queensu.ca. The final day you can request credit reassignment is the final day of class. Signing up for studies is done through the Sona site directly: [CLICK HERE](#)

What if I don't want 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

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

What if I can't make a research appointment?

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.

Who should I contact for help?

*Note: 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) should be directed to the participant pool coordinator at participant.pool@queensu.ca.