PSYC 271 - Brain and Behavior

Course Syllabus, Winter 2021

Course Information

Course Description

An introduction to behavioral 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.

Prerequisite: PSYC 100/6.0.

What this course will look like:

You will notice that this course follows a modular structure in which you will find each week of the course. Each week is complete with readings, interactive course notes, videos, non-graded self-check activities, and assessments. Together, these instructional materials will help you work through key concepts and provide you with ample opportunity to refine your skills. At the top of each week, you will find the learning outcomes and all supporting content listed below it. You must complete all required tasks for each week.

Textbook Material: Reading the textbook is very important for you to obtain the foundational knowledge that is required for the course and is critical for all assessment components.

Interactive Course Notes: The interactive course notes are designed to cover the difficult and important topics for the week, and extend upon the current week's material. This extension will consist of discussing other research findings related to the topic (i.e., research not covered in the textbook), as well as discuss the applicability of the material to society as a whole. All content contained in the interactive lesson notes, including the videos, is required for the course and is critical for all assessment components. Videos labelled as "optional" will not be used for assessment purposes.

Course Video Library: As mentioned above, all videos within the interactive course notes are a required component of this course. All content contained within the videos is critical for all assessment components. As an additional study tool, we have created a comprehensive list of all course videos, organized by module. You can locate the Course Video Library by navigating to the top navigation bar on your onQ course home page under "modules".

Live Zoom Sessions: This course includes three optional live Zoom sessions. While participation is not required, you are encouraged to attend, as the sessions provide opportunities to discuss difficult concepts, ask any questions you may have, and review for the final exam. Dates and times for each Zoom session are listed in Course Timeline. If you are not able to attend a session, you may post your questions ahead of time to the Live Zoom Session Questions forum to ensure they are answered during the session. The recordings of all the sessions will be posted on the page after they are over.

University Operating Dates (LMS will include)

Learning Outcomes

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

Course Materials

The required textbook for this course is called:

Biopsychology, 10th Edition, by John P.J. Pinel & Steven Barnes, with accompanying REVEL access which is available through the Queens Campus Bookstore.

[Note that the package that included the printed copy of Biopsychology + REVEL is no longer available. The eText has replaced the package. eTexts are available in-store at the Campus Bookstore or from their website under the Access Code Search Engine.]

This course may make use of REVEL for some activities. Be aware that by logging into the site, you will be leaving onQ, and accessing the REVEL website. Your independent use of that site, beyond what is required for the course (for example, purchasing the company's products), is subject to Pearson Education's 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

To purchase the REVEL access code eText, please go to

https://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller_id=5&Course=PSYC+271+(Winter+2021)&frame=YES&t=permalink

Once you have purchased the access code, you will need to register for the REVEL software within your eText. To do so, please follow the steps outlined in this one-page student registration handout explaining the registration process.

Timeline

(LMS will link to the Timeline we built in onQ)

Suggested Time Commitment

Students can expect to spend approximately 9 hours a week in study/practice and online activity for this course.

Assessments

Weighting of Assessments

Assessment	Weight	Alignment with CLOs
Essay Part 1 (proposal)	7.5%	CLO 1,4
Essay Part 2 (final submission)	15%	CLO 1,4
Discussion Forum 1 – case study? TBD	5%	CLO 2, 4
Discussion Forum 2 – scenario-based? TBD	5%	CLO 1, 4
Bi-weekly Quizzes (best 5 of 6)	3.5% each (17.5%)	CLO 1,2,3,4,5
Final Exam	50%	CLO 1,2,3,4,5
Participant Pool	2.5% (bonus credit)	

Assessments and Activity Description

Essay

This course will include a two-part essay. For part 1, you will locate and briefly summarize a primary research article that covers a topic within biopsychology/behavioural neuroscience. Part 2 of the essay will require an expansion of this proposal, providing a more in-depth summary and critical analysis of the article. More information about Essay Part 1 and Essay Part 2 can be found in the Course Timeline.

Discussion Forums

There are two discussion forums in this course. The discussions will allow you to interact with your peers to explore key topics, perspectives, and application of concepts to real-world practice. More information about each discussion forum can be found in the Course Timeline.

Bi-weekly Quizzes

There will be 6 bi-weekly quizzes in this course, each covering 2 weeks of content (Quiz #1 will only cover 1 (the first) week of the course). Your best 5 quiz scores out of the 6 quizzes will be counted toward your final grade. The bi-weekly quizzes are designed to help you practice and apply your knowledge of the course concepts to gage your understanding of the material.

Final Proctored Exam -

This course will include a cumulative final proctored exam, which will cover all content covered from Weeks 1 through 12.

Grading

All components of this course will receive numerical percentage marks. 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 Conversation Scale:

Queen's Official Grade Conversation Scale

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

Communication

Contacting the Teaching Team

The teaching team contact information is located on the Homepage of the course (see Teaching Team)

For general questions about the course, please post to the weekly Course Questions Forum. Feel free to help answer your peers' questions on this forum. Most questions are answered within 24 hours.

Please use your Queen's email for inquires that are more personal in nature, or for issues such as academic accommodations or marking. Your individual TA should be your first point of contact. For issues that are beyond the TA's expertise, or if you need to have a more detailed conversation, please contact your instructor.

Course Feedback

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

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.

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 is OK to disagree with ideas, but do not make personal attacks.
- 7. Be open to be challenged or confronted on your ideas and challenge others with the intent of facilitating growth. Do not demean or embarrass others.
- 8. Encourage others to develop and share their ideas.

Queen's Email

The university communicates with students via Queen's email. Please check your email regularly to ensure you do not miss important information related to your course.

Policies

Late Assignment Submission Policy

All late submissions will be penalized by a 5% deduction from the grade for the affected assignment/project for each day late. Submissions that occur between 1 min to 24 hours after the stated deadline are considered 1 day late; submissions received from 24 hours and 1 min to 48 hours late are considered 2 days late; etc.

Copyright

Course materials created by the course instructor, including all slides, presentations, handouts, tests, exams, and other similar course materials, are the intellectual property of the instructor. It is a

departure from academic integrity to distribute, publicly post, sell or otherwise disseminate an instructor's course materials or to provide an instructor's course materials to anyone else for distribution, posting, sale or other means of dissemination, without the instructor's express consent. A student who engages in such conduct may subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights.

Academic 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.

The Senate Policy for Accommodations for Students with Disabilities was approved at Senate in November 2016. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, please visit the QSAS website

Students with course accommodations should send their accommodation requests to ASO and their instructor as soon as possible to make the appropriate arrangements, using the widget located on the course homepage.

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. Click here to view 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 here; students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

Situation 1: Athletics

If you have a University sanctioned athletic game at the same time as an assessment, then you are eligible for academic consideration. Note that practices or travel to events are not eligible for academic consideration.

To be eligible for an academic consideration for athletics, you must make a request for academic consideration according to the "Excused Absence for Significant Event" protocol outlined here. Please also include the time and location of the game.

If your request for academic consideration is approved, please forward the confirmation email you receive from the Faculty Office directly to your instructor. In your email, make sure to indicate what assessment items you are requesting accommodation for, as well as the assessment date.

Your instructor will then advise Arts & Science Online of what they would like arranged (in light of the consideration) and what changes need to be made in onQ.

Situation 2: Extenuating Circumstances

Submit a request for academic consideration through your Faculty. For Arts & Science students, such requests should be made through the student portal. Students in all other faculties should follow the protocol of their home faculty (even though you are taking an Arts & Science elective). Please note that family events such as vacations, weddings, transportation or technology concerns, competing commitments, and academic stress are not considered extenuating circumstances.

If your request for academic consideration is approved, please forward the confirmation email (or a screenshot of the email) directly to your instructor. Make sure to indicate what assessment items you are requesting accommodation for, as well as the assessment date.

Your instructor will then advise Arts & Science Online of what they would like arranged (in light of the consideration) and what changes need to be made in onQ.

Academic Support

All undergraduate students face new learning and writing challenges as they progress through university: essays and reports become more complex; effectively incorporating research into writing becomes more important; the types of assignments become more diverse; managing your time and developing the skills you need to read and think critically gets more challenging. I encourage students to contact Student Academic Success Services (SASS). SASS offers many different ways to receive support:

Free online or in-person appointments to get personalized support on writing and academic skills from expert staff and trained peers.

Workshops and drop-in programs. SASS' Events Calendar lists events coming soon.

Online resources that provide strategies for academic skills and writing development at university.

If English is not your first language, SASS has specific resources for English as Additional Language students, including weekly programs and EAL academic skills appointments. You can meet on an ongoing basis with an EAL consultant to work on your academic writing, speaking, listening, and reading skills.

Academic Integrity

The following statement on academic integrity builds on a definition approved by Senate and is designed to make students aware of the importance of the concept and the potential consequences of departing from the core values of academic integrity. It is highly recommended that this statement be included on all course syllabi. Instructors may also consider including this statement with each assignment.

Queen's students, faculty, administrators and staff all have responsibilities for upholding the fundamental values of academic integrity: honesty, trust, fairness, respect, responsibility and courage. These values 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).

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), on the Arts and Science website, 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.

Computer Requirements

Please note that mobile devices are not recommended for the course as they cause several known issues in onQ.

Computer Specifications

Windows 8.1 or newer

OS X 10.13 (High Sierra) or newer

Dual Core 2 GHz processor

4 GB RAM

Soundcard

USB headset

Webcam

Supported Browsers

Chrome (preferred - latest version)

Firefox (latest version)

Safari is not recommended as it causes several known issues in onQ

Edge is not recommended as it causes several known issues in onQ

Internet Connection

Wired high speed access: Cable or better

Wifi is not recommended

Java

Latest version

Media Player

Flash (latest version)

Adobe Reader

Latest Version

Students Studying or Travelling Abroad

If you plan to travel, we strongly recommend that you confirm Internet availability in your host country prior to departure. In the past, students in other countries have been blocked from accessing certain websites relevant to their courses, as well as onQ. It is the responsibility of all students to book travel around course work, as we cannot change the format or timing on assessments or assignments as a result of travel plans

Participant Pool 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 2.5%.** 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 <u>Sona</u> for the participant pool. 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.

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 <u>unexcused</u> 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, prescreening) should be directed to the participant pool coordinator at participant.pool@queensu.ca.