PSYC 370 W2023 Syllabus

Course Description

This course examines the relationship between brain and behaviour. The first part of the course examines topics relevant to brain plasticity, including neurodevelopment, brain damage and learning and memory; followed by sections on the biopsychology of motivation that cover the neural mechanisms of eating, addiction, sexual behaviour and sleep. The final section deals with disorders of cognition and emotion, including stress and psychiatric disorders.

Psychology 370 is a course designed to continue your exploration of the field of Biopsychology. It primarily focuses on the underlying neural mechanisms of some of the most interesting and complex human behaviours. From how the brain develops, to our basic motivations, to how catastrophically the brain can fail us, this course delves into many different aspects of brain and behaviour.

Queen's University's Department of Psychology has a long history of impressive research in the field of biopsychology. From labs looking at neuroendocrinology and the neurobiology of anxiety to investigating cognition in psychological disorders, many researchers in the Department are tackling important biopsychological questions through different techniques and perspectives, and more information can be found on the Department of Psychology website as well as through spotlights throughout the course.

Course Author

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Initial Development Date

Fall 2022

Course Learning Outcomes

- 1. Outline the primary stages of neural development in humans;
- 2. Describe the process of neuroplasticity and how it relates to learning;
- 3. Summarize current theories on the biopsychology of eating, sleeping, sexual behaviour, and drug addiction;
- 4. Evaluate research findings relating to the biopsychology of motivation, cognition, and emotion; and
- 5. Relate principles of biopsychology to an understanding of psychiatric disorders.

University Operating Dates

Please visit the Faculty of Arts and Sciences Sessional Dates website for all academic deadlines.

Course Timeline

The Course Timeline shows all relevant course dates, including assessments, as well as links to other important course information. As dates may change, you should consult the Timeline each time you log in to the course.

Please note, some students may see an onQ Calendar for their course. However, the onQ calendar does not display all dates associated with your course assignments. For complete information on all of your assignments in this course and the start and close dates, please refer to the Course Timeline.

If there are discrepancies between dates in the course onQ site, the Timeline will be considered accurate.

All times are in Kingston time (Eastern Time).

Land Acknowledgment

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, Diversity and Inclusivity 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.

Commitment Statement

In this class I will work to promote an anti-discriminatory, anti-racist and accountable environment where everyone feels welcome. Students in this class are encouraged to participate during class discussions and to support others in their participation. Because the class will represent a diversity of individuals, beliefs, backgrounds, and experiences, every member of this class is asked to show respect for every other member.

Knowing and applying students' names and pronouns is a crucial part of developing a productive learning environment that fosters safety, inclusion, and personal dignity. This is an important part of the inclusion work here at Queen's.

Name/Pronoun

If you wish to change how your name appears in onQ and on class lists, please follow these steps. You may also use this process to add your pronouns to the appearance of your name.

Log into SOLUS.

Click on Personal Information tab.

Click on the Names tab

Click on the Add New Name tab

Choose Preferred from the Name Type drop down menu

Enter your preferred name.

Click Save.

Please allow 24 to 48 hours for your preferred name to be registered within the system. If you have further questions or concerns please contact ITS at Queen's University.

Course Textbook

Available from the Queen's Campus Bookstore:

Biopsychology, 11th Edition, by John P.J. Pinel and S.J. Barnes. As per Pearson's digital first campaign, there will be no physical copies in the bookstore.

I often have students asking whether the 10th edition or the 9th edition of the textbook will be okay to use. As there is a lot of new research in this latest edition, it is really up to individual students whether they choose to use an older version, knowing they will be missing out on some information that could be tested on the guizzes or final exam.

Please note, Pearson REVEL is not required for this course and has not been approved for use through the Queen's Security Assessment Process.

Copyright of Course Materials

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 be subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights.

Netiquette/Discussion Guideline

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.

Make a personal commitment to learn about, understand, and support your peers.

Assume the best of others and expect the best of them.

Acknowledge the impact of oppression on the lives of other people and make sure your writing is respectful and inclusive.

Recognize and value the experiences, abilities, and knowledge each person brings.

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.

It's ok to disagree with ideas, but do not make personal attacks.

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.

Encourage others to develop and share their ideas.

Suggested Time Commitment

In this course, you should expect to invest on average 10 to 12 hours per week. This will include the time you spend studying course material, practicing course objectives, and participating in course activities and assessments. You are encouraged to adhere to a pre-determined study schedule as you will be more likely to complete the course on time successfully.

Course Announcements

I encourage you to actively check the course onQ main page for course announcements throughout the semester for reminders and additional course information or learning opportunities.

Course Questions and contacting the Teaching Team

Throughout this course, you may come upon some general questions about the course and assignments. If you think that your question may benefit other students, you are invited to post your question in the Course Questions Forum. Feel free to help answer your peers' questions on this forum. The teaching team will monitor this discussion forum and answer questions. Most questions are answered within 48 hours, except on weekends and holidays.

Any other questions that you would prefer to share privately, please contact me or your TA. The teaching team contact information is located on the Homepage of the course (see "Teaching Team"). Please note that emails will NOT be answered on the weekends, holidays or evenings.

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.

Course Feedback

At various points during the course, I may ask you to take part in a variety of feedback activities, such as surveys and questionnaires. This feedback enables my teaching team and me to make any adjustments necessary to improve your learning environment. Additional feedback may be requested throughout the course. All surveys are anonymous and are directly related to activities, assessments, and other course material.

Alignment of Assessments with Learning Outcomes

Course Assessment	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5
Discussion Activities (2)	Х	Х	Х	Х	Х
Essay Assignment		Х		Х	
Presentation Assignment - Brain Disorders/Brain Damage		х		Х	
Module Quizzes (7 of 6)	Х	Х	Х	Х	
Final Proctored Exam	Х	Х	Х	Х	Х

Weighting of Assessments

Assessment	Weight
Discussion Activities (2)	5%
Essay Assignment	10%
Presentation Assignment - Brain Disorders/Damage	25%
Module Quizzes (7 of 9)	10%

Final Proctored Exam	50%

Description of Learning Activities and Assessments

Discussion Activities

At two different points in the course, you will be required to submit an answer to two discussion questions via the discussion forum. These discussion questions are an opportunity to provide your own viewpoint on a specific real-life scenario, based on key information and principles from biopsychology.

For more details, please consult the course Timeline.

Essay - Stress Management

This course includes one written essay assignment where you will investigate different stress relieving techniques from a biopsychological perspective.

For more details, please consult the course Timeline.

Presentation - Brain Disorders/Brain Damage

Biopsychology is a rapidly developing field which takes advantage of converging operations. Everyday, new and impactful studies are published that are providing important information about brain damageits etiology, diagnosis and treatment. For this assessment, you will be assigned a neurological disease/cause of brain damage, and asked to present a pre-recorded presentation on the latest research. The presentation will be done using a voice-over PowerPoint recorded presentation or Google Slide recorded presentation, and posted to the discussion forum for others to watch. You will also participate in an asynchronous Q & A period by asking questions about each presenter's content, and responding to questions on your own presentation.

For more details, please consult the course Timeline.

Module Quizzes

This course includes 9 module quizzes. Your final grade will be based on your highest 7 quizzes. Each quiz will consist of 10 multiple-choice questions based on the weekly material from the textbook, module notes, and any assigned videos. You will have 10 minutes to complete each quiz. Please note that as the questions largely come from a copyrighted testbank, the questions/answers will not be released. So, while you will automatically get a grade, you will not be able to review your quiz. However, if you have specific questions about your quiz, please contact your instructor.

For more details, please consult the course Timeline.

Final Exam

The 3-hour final exam will be written during the Exam Period (see Timeline). It will consist of 100 multiple-choice questions, covering the entire course.

For more details, please consult the course Timeline.

Essential Requirements and Flexibility to Succeed

Participating in the peer-review portion of the "Presentation - Brain Disorders/Brain Damage" assignment is an essential component of this course. Recognizing that unexpected barriers may pop up, you are strongly encouraged to meet all the deadlines to fully participate in the assessment (i.e., Part 1, 2, and 3) which scaffold and build upon each other.

There may be a time when you are unable to complete a quiz for personal reasons. While the quizzes are designed to provide you an opportunity to keep up with your readings and get experience with multiple-choice tests, in order to help you to build in flexibility, only your best 7 quizzes (out of 9) will count towards your quiz grade. For more information, see Academic Regulation 7.2.1.

Late Submission Policy

Discussion Questions

A late penalty of 0.5 marks per day (24 hours) will be deducted for late assignments.

Essay - Stress Management

A late penalty of 1 mark per 24 hours will be deducted for late assignments (out of 20). Please note that no essays will be accepted after the essays and feedback are returned to students.

Presentation - Brain Disorders/Brain Damage

A late penalty of 1 mark per day (24 Hours) will be deducted for the presentation, and a late penalty of 1 mark per day (24 Hours) will be deducted for the 'Question and Answer' portion of the assessment.

Module Quizzes

As two of the quizzes will be dropped when calculating the final grade, there will be no extensions for the quizzes.

Proctored Exams

When you registered for this course, you indicated a preferred exam location.

- Students who have on-campus courses (or course sections) will write their final exams in-person and on-campus. These final exams will be administered* through the central Exams Office.
- Students who have courses (or course sections) that are remote or online, but who have other
 on-campus courses (or course sections) in their timetable, will write <u>all</u> of their final exams inperson and on-campus. These final exams will be administered* through the central Exams
 Office.
- Students who have only remote or online courses (or course sections) in their timetable, and who require remote proctoring, will have their exams proctored using Examity.

For exams being offered remotely, <u>Academic Regulation 7.2.3. Restrictions on Assessment</u> is waived. Remote exams will be allowed in the last two weeks of classes and in the study, period

designated by Senate prior to the examination period to accommodate the limited number of online proctoring seats available.

Remote Proctoring Statement

The final exam and some tests/quizzes in this course will use remote proctoring provided by a third-party, cloud-based service that enables the completion of a proctored exam or test from an off-campus location, through onQ. This online proctoring solution was chosen as part of the approach to maintaining academic integrity in online assessment. Precise details about how remote proctoring will be used in this course can be found in the "Getting Started with Remote Proctoring" content module in onQ.

When writing tests and/or exams using remote proctoring, you are connecting to the third-party service. Queen's has conducted a privacy and security review of the service and has entered into a binding agreement with terms that address the appropriate collection, use and disclosure of personal information in accordance with Ontario's privacy legislation.

You should also take measures yourself to protect your information by keeping your NetID password and challenge questions private, closing all applications prior to starting an exam/test, and ensuring your device is updated and safeguarded against malware.

For more information about remote proctoring, see the Office of the University Registrar's website.

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; they are posted on the Friday before Reading Week for the Winter Term; for the summer term, they are individually noted on the Arts and Science Online syllabi. Students should delay finalizing any travel plans until <a href="after:af

Grading Scheme and Method

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 Conversion Scale:

Queen's Official Grade Conversion Scale

Grade	Numerical Course Average (Range)
A+	90-100
А	85-89
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

How to Approach the Material

PLEASE NOTE: In order to schedule the assessments evenly across the term, the chapters of the textbook will not be covered in sequential order. Please see the Course Timeline for more details.

The first thing you should do is watch the Welcome Video! It provides an overview of the course and introduces the topics/modules we will be covering in Brain and Behaviour II.

Each module consists of a number of different sources of information including textbook readings, course notes, and other readings and videos, to provide you with a strong understanding of the topic. Each module begins with a narrated PowerPoint presentation, which provides an overview of the topic, the learning outcomes, as well as some of the interesting research that will be presented.

After viewing the Module Introduction video in each module, please read the assigned textbook chapter. Next, review the Course Notes, which provide extra information or a different way of explaining some of the textbook material. The course notes will include some written material as well as videos to explain some topics in more depth, as well as links to other relevant videos/websites.

By using the Module Overview PowerPoint presentations, textbook, course notes and other readings and videos, I hope it is easier to understand the (sometimes) complicated topics within Biopsychology.

As this is a third-year course, you are expected to bring with you a certain level of knowledge about the brain and its behaviour. You may choose to review some basic neuroanatomy and neurophysiology (found in the earlier chapters of the textbook) before starting to work on the course material.

Throughout the course, as well as the textbook, four major themes are repeated and should be kept in mind when studying the material.

- **Thinking creatively** or thinking in productive, unconventional ways is the cornerstone of science and there are many research examples of this principle in Biopsychology.
- Much of what we have learned about the brain has come from various patient populations, so
 this course also has strong clinical implications that highlight the interplay between brain
 dysfunction and biopsychology.
- There is also an important **evolutionary perspective** that must be considered in biopsychological research, especially with comparative studies.
- Much of the research covered in Psychology 370 is influenced by principles of **neuroplasticity**: that the brain is a 'plastic' organ that grows and responds to an individual's genes and environment.

There are also two emerging trends that are heavily influencing current biopsychological research:

- 1. **Thinking about epigenetics** which is the study of all mechanisms of inheritance other than the genetic code and its expression. It largely focusses on the ongoing interactions between your genes and your experiences, and not just for the present generation but also subsequent generations.
- 2. **Consciousness**-examining different aspects of consciousness, which is defined as the perception or awareness of some aspect of one's self or the world. Some topics of investigation include different states of consciousness after neural dysfunction as well as how some information reaches our consciousness, while other information is filtered out.

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 <u>appointments</u> 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.

Accommodations for Disabilities

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 <u>Senate Policy for Accommodations for Students with Disabilities</u> 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 <u>QSAS website</u>.

Students with course accommodations should add their information to Ventus using the widget located on the course homepage.

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 <u>Senate Policy on Academic Consideration for Students in Extenuating Circumstances</u>.

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. For more information, undergraduate students in the Faculty of Arts and Sciences should consult the Faculty's webpage on Academic Consideration in Extenuating Circumstances and submit a request via the Academic Consideration Request Portal. Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their instructor and/or course coordinator as soon as possible once Academic Consideration has been granted. Any delay in contact may limit the options available for Academic Consideration.

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 the Faculty of Arts and

Science <u>Academic Consideration website</u>. ASO courses include links to information on **Academic Accommodation** on your **Course Homepage** in onQ.

Please see the Teaching Team page for all contact information regarding Academic Accommodations and Considerations.

Academic Integrity

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 <u>Academic Regulation 1</u>), on the <u>Arts and Science website</u>, 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.

You may benefit from visiting these websites for further tips on what constitutes plagiarism and how to avoid it.

- Avoiding Plagiarism: Paraphrasing
- Quoting and Paraphrasing

Technology 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
- A minimum download speed of 10 Mbps and up to 20 Mbps for multimedia is recommended
- Click here for an Internet speed test

Java

Latest version

Media Player

• HTML5 compatible

Adobe Reader

Latest Version

Students Travelling or Studying 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.