# **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 a section on the biopsychology of motivation that covers 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 <u>Department of Psychology website</u>.

# **University Operating Dates**

Sep 1

Tuition due

Sep 5

Classes start

**Sep 18** 

Last day to add courses

**Sep 18** 

Last day to drop courses without financial penalty

Nov 1

Last day to drop without academic penalty

Nov 7

Last day to change exam centre

Last day to submit exam accommodation requests (if applicable)

**Nov 29** 

Classes end

**Dec 4-19** 

# **Learning Outcomes**

- Build upon the key principles of biopsychology presented in PSYC 271, with a focus on higher cognitive processing.
- Gain an understanding of the complexity of brain and behaviour interactions and how both nature and nurture play important roles.
- Learn to critically evaluate new research in the field of biopsychology.

### **Course Materials**

#### **Textbook**

Available from the **Queen's Campus Bookstore**:

• *Biopsychology*, 10th Edition, by John P.J. Pinel, ISBN 9780134567730. That is for the stand alone access code that includes REVEL and eText. As per Pearson's digital first campaign, there will be no physical copies in the bookstore. Students can buy a looseleaf version directly from Pearson when they register their access code.

I often have students asking whether the 9<sup>th</sup> edition or the 8th edition of the textbook will be okay to use. There is a lot of new research in this latest edition, as well as the REVEL multimedia, so 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 midterm or final exam. Some students have also asked about using the 10th edition without REVEL access. Again, I think it is beneficial to have access to the multimedia and quizzes but it is up to the individual student.

This course uses a Pearson digital product which contains resources used throughout the semester. The required link below is unique to this course. Here is how to register:

### Here's how to access the REVEL materials:

- 1. Go to https://console.pearson.com/enrollment/ozbdbl
- 2. Sign in to your Pearson Account or create one. If you already had access to REVEL (from PSYC 271) when you go to the new REVEL invitation link for PSYC370, you will simply be added to the new REVEL course without being prompted for another access code as long as you use the same username and password as you did for PSYC271.
- 3. Follow the onscreen instructions to redeem your access code. Choose your course under 'My Courses' and choose an access option. It is recommended that you purchase an access code from your campus bookstore for redemption here. Queen's Campus Bookstore is a non-profit organization, and provides the best value to students. Purchasing instant access in REVEL may result in extra fees associated with currency exchange. There is also a free trial if you are waiting for financial aid.

### What you should know:

- Bookmark https://console.pearson.com to easily access your materials.
- Pearson recommends using the latest version of Chrome, Firefox, or Safari with this digital product.

One of the important changes to this newest edition of the textbook is that embedded within the text are a number of videos and simulations. So, as you are reading through a particular section in the physical copy of the text, you may come across a video that will need be accessed through REVEL. If you are using the online text, then you are already in REVEL and can just click on the video. Please note, you will need to make sure pop-ups are allowed in order for the multimedia to work properly.

If you have problems accessing REVEL or trouble viewing the videos/simulations on the site, **please** contact the REVEL website administrators directly through the help button, rather than emailing myself or the TAs. They have the ability to address your issues much better than we do, and so we will always redirect your questions back to them.

## **REVEL Chapter Quizzes**

REVEL includes a number of chapter quizzes which can be used as a study tool and provide practice with multiple-choice questions. These quizzes are for practice only and do not contribute to your grade int the course. Please note, however, that those multiple-choice quizzes may be easier than those on the Midterm, and only have 4 choices rather than 5 choices. To access the quizzes, they need to be assigned for the course and given a due date. So a series of "assignments" have been set up for Chapters 1-18 with a due date of March 2020. The material is available immediately and will remain available for a year (in case any students need to write a make-up exam after the course is over). PLEASE NOTE: these assignments have been created to allow access to all the activities and quizzes, they are NOT in fact real assignments that will be included in your final grade. They are available for students to use as study tools and to practice writing MC exams, but are not a required component of the course.

## **Third Party Policy**

This course makes use of <u>REVEL</u> for some activities. Be aware that by logging into the site, you will be leaving onQ, and accessing the <u>REVEL</u> 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

## **Suggested Time Commitment**

To complete the readings, assignments, and course activities, students can expect to spend, on average, about 12 - 18 hours per week on the course.

## **Weighting of Assessments**

Icebreaker
2.5%
Midterm
15%
Presentation
20%
Essay
12.5%
Final Proctored Exam
50%

# **Assessments and Activities Description**

#### Course Icebreaker

To start off the course, all students will be required to submit an answer to an Icebreaker question. It will be only worth 2.5% of the total grade and based on participation/submission only. This assignment is designed both for you to think about biopsychology as a discipline and for the marking team and fellow students to get to know you. More details on the icebreaker can be accessed through the <u>Timeline</u> or the link below.

#### Icebreaker Forum

#### Midterm

The second evaluation for the course will be an online multiple choice midterm. It will consist of 30 questions and be worth 15% of the final grade. The midterm will cover Modules 1,2, 3 and 4. Further details on the midterm can be accessed through the Timeline or the link below.

### **Midterm Information**

### **Group Presentation**

Biopsychology is a rapidly developing field which takes advantage of converging operations. Every day, new and impactful studies are published that are providing important information about brain damage-its etiology, diagnosis and treatment. For this assessment, each student will be assigned a neurological disease/cause of brain damage to present to the other students in their group. This will be done using a voice-over powerpoint presentation. After the presentations have been uploaded, group members will comment and ask/answer questions about the information presented. In total, this group project will be worth 20% of your final grade (15% for

the presentation and 5% for the comments). For more details on this Group Presentation, please look under the Timeline or the link below.

## **Group Presentation Assignment**

## **Essay Assignment**

Students must also complete one written essay assignment. The assignment consists of 1 long-answer/essay question from Module 8 and it is worth 12.5% of your final grade. For more details on this Essay Assignment, please look under the Timeline or the link below.

## **Essay Assignment Description**

#### **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 and is worth 50% of your final grade. For more details on the Final Exam, please look under the Timeline or the link below.

### **Final Exam Information**

## PLEASE NOTE: You must PASS the final exam in order to pass the course.

## **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.

For each Module, there are a number of different sources of information to hopefully give you a strong understanding of the topic. You should first open the 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. It is basically what I would say to an in-house class, on the first day of covering a new topic.

You should then read the associated textbook chapter.

Next would be the Module Course Notes which provide extra information or a different way of explaining some of the material. The **Course Notes** are an important feature of your online course, but for PSYC 370 are quite brief. Especially for those students who took PSYC 271 with me, these notes are quite different! Basically, they introduce the topic, detail the objectives, attempt to place the topic in the larger research area and highlight some interesting research in the area that is not covered in the textbook.

Also, for each Module there are videos, demonstrations and exercises from the online textbook (REVEL) and other websites. These are all designed to augment the information in the textbook and course notes. Sometimes seeing a principle in action is much easier to understand than reading a few paragraphs on it (i.e. how movement in the cochlea allows us to hear).

Current journal articles – these can be accessed through e-reserves through the Module Notes or E-Reserves link at the right of the Homepage. For examination purposes, I will not be asking specific details about these experiments but you should know the hypothesis, general experimental design and conclusions.

By using the powerpoint presentations, textbook, course notes and the multimedia, 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 Chapters 3 and 4 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.

# **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 Conversion Scale:

Oueen's Official Grade Conversion Scale

Grade	Numerical Course Average (Range)
A+	90-100
Α	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

# **Contacting the Teaching Team**

The teaching team contact information is located on the Homepage of the course (see "<u>Teaching Team</u>") and we are here to help, however before emailing the instructional team, students need to check the syllabus, the timeline, and course announcements to look for the answer to their question. If a student contacts the teaching team with a question that could be answered in one of these locations, they are given the message to "check 3" to guide them to the right location of the course for their answer.

If after checking the syllabus, the timeline and the course announcement, a student still has unanswered general questions about the course, they can post to the Course Questions Forum, (located under Help in the navigation bar). Feel free to help answer your peers' questions on this forum. Most questions are answered within 24 hours. Please note that this forum is for constructive questions only, it is not a forum for complaints about the course or teaching team. If posts are deemed inappropriate, they will be removed.

Please use your Queen's email for inquires that are more personal in nature, or for issues such as academic accommodations or marking. 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 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.

## 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 reread 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 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.

# 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.

## **Accessibility/Accommodations**

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at Senate in November 2016. 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.

Students with course accommodations should contact ASO immediately following registration to inform them of any accommodations to their timed assessments and/or final exam(s).

### **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 <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. Arts and Science undergraduate students can find the <u>Faculty of Arts and Science protocol and the portal where a request can be submitted at at the following link</u>. Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

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

## **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; <a href="https://honesty.trust.fairness.respect.responsibility.nd">honesty.trust.fairness.respect.responsibility.nd</a> and <a href="https://courage.com/courage">courage</a>. 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 <u>Senate Report on Principles and Priorities</u>).

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 onO
- 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.