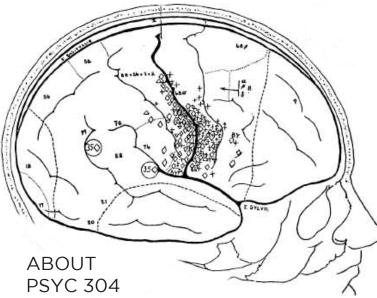
PSYCHOLOGY 304-901: BRAIN & BEHAVIOUR 2019W



Psychology 304 is a comprehensive course covering most of the larger topic areas in Biopsychology (aka Behavioural Neuroscience). This course places equal emphasis on (1) attaining the essential background knowledge necessary to effectively navigate and interpret the biopsychological literature, and (2) teaching you how to think critically and creatively about biopsychological issues. Yet, the content of Psyc 304 is not merely academic: Much of what you will learn in this class can be readily applied in your every day life.

LEARNING OUTCOMES

By the end of this course you should be able to

- understand and use the language of biopsychology and neuroscience.
- understand and situate particular biopsychological phenomena within a historical context.
- navigate the biopsychology and neuroscience literatures with some confidence.
- spot some common errors in thinking about biopsychological phenomena.
- apply biopsychological knowledge in your everyday life.

COURSE STRUCTURE

Psychology 304 is a lecture-based course. Draft lecture slides will be provided on the course website (see below) prior to class. Final versions of lecture slides will be posted on the course website by the end of each week.

WHO, WHEN, WHERE

Instructor:Steven Barnes
Online Office Hour: Wed 5:00-6:00 (via Collab-
orate Ultra on Canvas), and by appointment.
In-Person Office Hour: Tues 7:30-8:30 (after
class in SWING 122) and by appointment.
psyc304@psych.ubc.caTeachingMatthew CookeAssistants:Office Hours: by appointment.
psyc304@psych.ubc.ca

TBA

Office Hours: by appointment. psyc304@psych.ubc.ca

Schedule: Tues, 5-7:30 SWING 122

Websites: psyc304.metaplasticity.com

The course website includes the following: Lecture schedule, slides, course syllabus, course project information, and a collection of course-related links. Please check for updated information about required readings, schedule changes, etc.

revel.pearson.com

We will be using the Revel platform that accompanies the course textbook because it has richer content than the text alone and because it provides many self-check questions and quizzes for the text readings.

To access your materials, follow the link (unique to this course) below:

1. https://console.pearson.com/enrollment/ irb2i0

2. Sign in or create a Pearson Account.3. Redeem your access code or purchase instant access online. (A free 14-day access option is also available.)

canvas.ubc.ca

We will be using Canvas only for the posting of grades. You are also welcome to use the Discussion forums. Note, however, that they will not be monitored regularly by myself or the TAs.

Notes: (1) Office hours might change; please check the course website for updates; (2) In most cases, emails will be answered within 48 hours on weekdays (not on weekends) during normal working hours; (3) When you send us an email, the subject line should include the nature of the inquiry (i.e., "Question about the limbic system"); (4) If you do send us an email that is content related, it should contain no more than one question and you should try to explain your current understanding of the content in the email (which will be affirmed or corrected by us); (5) Canvas and Revel capture data that can provide information that can be used to improve the quality of teaching and learning; we plan to use analytics data to view overall class progress and review statistics on course content being accessed to support improvements in the course.

ACKNOWLEDGEMENT

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the Musqueam people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

PREREQUISITES

There are two prerequisites for this course:

- 1. You have completed either: (a) PSYC100, or (b) two of PSYC101, PSYC102, PSYC205, PSYC207, PSYC208, PSYC216, PSYC217.
- 2. You are in the second year or later of your undergraduate degree or you are in a graduate degree.

Note that you cannot receive credit for both PSYC304 and PSYC370/371.

EVALUATION

1. Exams (up to 88%):

There will be six exams: 2 will be written during the exam periods at a time designated by the Registrar's Office (you must be available to write at any time during the exam periods), and 4 will be written during class time.

Exam 1 (12%)	Oct 1 (class time)
Exam 2 (14%)	Nov 5 (class time)
Exam 3 (14%)	Dec 3-18
Exam 4 (14%)	Jan 28 (class time)
Exam 5 (14%)	Mar 10 (class time)
Final Exam (20%)	Apr 14-29

Notes on the Exams:

- Exams 1-5 are not cumulative. The final exam is mostly not cumulative, but will have several essay questions that are cumulative.
- There will be no makeup exams (except under certain circumstances when the Final Exam is missed--see below).
- You will not be accommodated for missing Exams 1-5 unless you contact me within 48 hours of missing the exam.
- Being accommodated for missing any of Exams 1-5 is at my sole discretion.
- If you are accommodated for missing one of Exams 1-5, that portion of your course grade will be evenly split amongst the remaining exams in the course. If you are accommodated for missing more than one of Exams 1-5, you will be assigned a research project to make up for that portion of the grade corresponding to those missed exams.
- If you miss the Final Exam, you must contact your Faculty Academic Advising Office to address the issue--note that

they will probably require medical or other documentation. Please refer to the UBC Calendar for details of 'academic concession.' Please note that a makeup for the Final Exam will differ from the versions used for the rest of the class.

- You will not be allowed to write an exam if (1) you are more than 30 minutes late, or (2) another student has already submitted their exam--whichever occurs first.
- Note that, during exams, either myself or the invigilators reserve the right to move you to a new seat without providing an explanation.
- The dates of Exam 3 and the Final Exam are not announced by the University until mid-October and mid-February, respectively. You should not make any travel plans until you learn the dates of Exam 3 and the Final Exam.
- There will be topics covered in class that are not in the text and topics in the text that are not covered in class. You will be responsible for both. That is, all readings and all lecture materials are examinable.
- Exams will include multiple-choice and short-answer questions. Except for the final exam which will have several cumulative essay questions.
- Note that the instruction on all multiple-choice questions will be to "select the single best response."
- If you encounter what you believe to be a faulty question on an exam, answer it to the best of your ability under the circumstances, and write a brief explanation of what you think is the problem on the front of your exam. Occasionally, bonus marks are awarded to those who spot ambiguities or errors.
- Once exams have been marked, grades will be posted on Canvas. You will receive an email notification when grades are posted (please ensure the University has your correct email address).
- You are strongly encouraged to review your exam with your TA. Most requests for grade adjustments can be settled directly with your TA. In cases of a dispute that cannot be satisfactorily resolved, I will render a decision after reading your exam and talking to both parties.
- Any grading disputes (other than calculation errors) must be handled within 2 weeks of exam grades being released.

2. Optional Project (up to 20%):

You may elect to do a project on a topic of your choosing that is related to the course materials. If you do elect to do a project, the grade you receive on that project will be worth 20% of your final grade, and the grades you receive on each of the exams will be worth the following:

Exam 1: 9% Exam 2: 11% Exam 3: 11%

Exam 4: 11% Exam 5: 11% Final Exam: 15%

Note that your grade on the course project will only be counted if it improves your final grade in the course.

There are three purposes for this course project:

1. To offer you the chance to explore a topic of your choice in greater depth than the lecture and text can offer.

2. To assess your ability to think both critically and creatively.

3. To offer you a chance to explore other ways of expressing your knowledge. <u>That is, to compose a project that is not a traditional written paper.</u>

In previous years, students have created short videos, paintings, computer models, musical compositions, graphic novels, dance sequences, and stop-motion animations; some have done community service learning.

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If you are ever unsure of whether the topic or format of your project is acceptable, please ask me.

You will need to clear your project topic and format with me. This can be done informally by email on or before **Oct 8**. I will provide you with a <u>customized grading scheme</u> for your specific project.

Your project should be one that is done for this course exclusively; handing in work done for another course (past or present) is not acceptable.

You are expected to read a minimum of 10 peer-reviewed journal articles to inform the content and format of your project. When your chosen topic is one that is the subject of ongoing research, you are expected to use sources that are as up to date as possible.

Project Due Dates and Grading. Your grade for the course project is comprised of two items:

Preliminary Draft (10%)	Nov 19
Final Project (90%)	Mar 31

Please note that late submissions will result in -10% per day.

Your custom grading criteria will specify what you will be required to hand in for each due date. The purpose of the preliminary draft is to allow me to give you some initial feedback on your work.

Note that you will be required to hand in your graded prelimiary draft with your final project. This is to ensure that you have incorporated the feedback I have given you. To that end, if you do not hand in a preliminary draft you will not be able to hand in a final version of your project.

3. Revel Readings Assignments (12%)

We will be using the Revel platform that accompanies your textbook. The revel platform offers a richer media experi-

ence and also offers many self-check questions to help you self-assess your understanding of the text readings.

Log into Revel (see registration instructions on page 1 of the syllabus) frequently and check the assignment calendar to ensure you are keeping up with the assignments. You are required to complete all Revel assignments before the due date. Late submissions will not be accepted, so plan accordingly.

Revel assignments, which are tied to each chapter, will be due before we cover the respective chapter

in class. Please see your Revel assignment calendar for all assignment due dates.

Some Tips for using Revel:

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• Frequent quizzes can aid in your understanding of the text materials.

- Track your performance in Revel throughout the course.
- Highlighting important sections in the chapter will allow you to easily refer back to them later.
- You may want to listen to the audio version of the text.

Some Notes on Privacy and Registration for Revel:

Please note that Revel is hosted on servers located in the United States. Accordingly, you may wish to elect to use a pseudonym when registering for Revel. If you do choose to use a pseudonym, please be sure to let me know what pseudonym you are using so that your grades on the Revel assignments can be retrieved at the end of Term 2.

4. Research Participation (up to 3% bonus):

You have the opportunity to earn up to 3 extra percentage points on your overall final grade by participating in studies regularly conducted by the Psychology Department and coordinated through the human subject pool (HSP). This provides you with the opportunity to observe the research process directly and to contribute to ongoing research activities at UBC. The extra credits are obtained by signing up for the subject pool at <u>ubc-psych.sona-systems.com</u>. If you plan to earn extra credit through research participation, please register in this online system by the end of the first month of classes.

You can find detailed information about research participation guidelines at *psych.ubc.ca/resguide.psy*. Please note that any inquiries about HSP credits should be directed to HSP and/or the experimenters that you worked with, not to me or your TA.

As an alternative to participating in studies, you may choose to complete library writing projects, in which you read and summarize a research article; each article summary counts as one hour of research participation. More information about this option can be found at *psych.ubc.ca/resguide.psy*.

All of your credits for study participation or the library option will be added to your final course grade, after any scaling that may have been applied. One half of a percentage point is assigned to your final grade for each credit earned (because this is a 6-credit course). Accordingly, you will need to complete 6 HSP credits to get the full 3% bonus.

Credits can be recorded and tracked via the HSP website. If you do not correctly assign your credits to this course, you will not receive credit, so please make sure you have done this correctly.

The last day to earn and assign HSP credits for each term is the final day of classes (i.e., Nov 29 and April 8).

Please note that you can only earn up to 3 HSP credits during term 1 and up to 3 HSP credits during term 2.

COURSE TEXT

Required: Pinel, J.P.J., & Barnes, S. J. (2017). *Revel for Biopsy-chology, 10th Edition*. Pearson, ISBN: 9780134567730. From time to time, this text may be supplemented by other readings or videos to facilitate your understanding of the course materials. Please attend class and check the course website to obtain more information about these readings and videos. This will cost you \$95 from the UBC Bookstore; \$119 from Amazon.ca.

Optional: Pinel, J.P.J., & Barnes, S. J. (2017). *Biopsychology, 10th Edition w/ Revel.* Pearson, ISBN: 9780134797168 (looseleaf version).

Optional: Pinel, J.P.J., & Barnes, S. J. (2017). *Biopsychology, 10th Edition w/ Revel*. Pearson, ISBN: 9780134883212 (hardcover version).

Note: You are required to purchase the Revel version of Biopsychology, 10e, for this course (the print version of the text is optional--though the looseleaf version above offers the best value in my opinion). I will assign homework activities in Revel-(see above)--they are worth 12% of your grade.

COURSE SCHEDULE

- Sep 3 Course Introduction and Overview
- Sep 10 Introduction to Biopsychology (Ch 1)
- Sep 17 Evolution, Genetics, & Experience (Ch 2)
- Sep 24 Neuroanatomy (Ch 3)
- Oct 1 Exam 1
- Oct 8 Neural Conduction & Transmission (Ch 4); Proposal for Optional Project Due (via email)
- Oct 15 Research Methods of Biopsychology (Ch 5)

	Oct 22, 29	Visual System (Ch 6)				
	Nov 5	Exam 2				
	Nov 12	Perception & Conscious Awareness (Ch 7)Re- corded Lecture (Steven Away)				
	Nov 19	Sensorimotor System (Ch 8); Preliminary Draft of Optional Project Due				
	Nov 26	Neurodevelopment (Ch 9)				
	Dec 3-18	Exam 3				
	December Break					
	Jan 7, 14	Brain Dysfunction & Neuroplasticity (Ch 10)				
	Jan 21	Learning, Memory, & Amnesia (Ch 11)				
	Jan 28	Exam 4				
	Feb 4	Hunger, Eating, & Health (Ch 12)				
	Feb 11	Sleep, Dreaming, & Circadian Rhythms (Ch 14)				
Midterm Break						
	Feb 25	Drug Addiction & Brain Reward Systems (Ch 15)				
	Mar 3	Drug Addiction & Brain Reward Systems (Ch 15)				
	Mar 10	Exam 5				
	Mar 17	Lateralization, Language, and the Split Brain (Ch 16)				
	Mar 24	Psychiatric Disorders (Ch 18)				
	Mar 31	Psychiatric Disorders (Ch 18); Final Version of Optional Project Due				
	Apr 7	Psychiatric Disorders (Ch 18)				
	Apr 14-29	Final Exam				

WITHDRAWAL DATES

If you wish to withdraw from this course without any record of the course on your transcript, you must do so on or before **Sep 24**. If you wish to withdraw with a "W" on your transcript, you must do so on or before **Nov 22**.

LEARNING & WELLNESS RESOURCES

Wellness resources are available on the Canvas page for the course (click the header image for the course to be taken to a list of wellness resources). There are also wellness resources available here: <u>https://students.ubc.ca/health.</u>

If you or someone you know is in crisis: <u>https://students.ubc.</u> <u>ca/health/crisis-support</u>.

Learning resources are available on this UBC page: <u>https://stu-dents.ubc.ca/enrolment/academic-learning-resources</u>.

GRADING AND ATTENDANCE

Grading. Your grade for each exam (and your project components, if applicable) will be posted on Canvas. If you wish to inspect your exam, you may do so by meeting with your TA.

In order to reduce grade inflation and maintain equity across course sections, all psychology courses are required to comply with departmental norms for grade distributions. According to departmental norms, the mean grade in a 300-level class is 70 for a good class, 68 for an average class, and 66 for a weak class (with a standard deviation of 13). Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by myself or the department. Grades are not official until they appear on your transcript. You will receive both a percent and a letter grade for this course. At UBC, your course percentage is converted to a letter grade according to the following key:

A+	90-100%	А	85-89%
A-	80-84%	B+	76-79%
В	72-75%	B-	68-71%
C+	64-67%	С	60-63%
C-	55-59%	D	50-54%
F	0-49%		

Because you are earning a degree at a highly reputable post-secondary institution, the criteria for success are high. The Faculty of Arts offers the following guidelines that broadly characterize the kind of work that is generally associated with the particular grade ranges. These characteristics help put the Psychology Department grading policies into perspective. Please note that adequate performance is in the C range.

A Range: Exceptional Performance. Strong evidence of original thinking; good organization in written work; capacity to analyze (i.e., break ideas down) and to synthesize (i.e., bring different ideas together in a coherent way); superior grasp of subject matter with sound critical evaluations; evidence of extensive knowledge base.

B Range: Competent Performance. Evidence of grasp of subject matter; some evidence of critical capacity and analytic ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.

C-D Range: Adequate Performance. Understanding of the subject matter; ability to develop solutions to simple problems in the material; acceptable but uninspired work; not seriously faulty but lacking style and vigor.

F Range: Inadequate Performance. Little or no evidence of understanding of the subject matter; weakness in critical and analytical skills; limited or irrelevant use of the literature.

Attendance. In this course, material that is taught in class may be different from or supplement the text material. Moreover, lecture slides are designed to provide a framework for the lecture and any discussions--thus, not everything in the lecture is in the slides. It is, therefore, essential that you both attend class and read ahead in the text. If you do have to miss a class, you are responsible for getting notes from another student.

During your time in this course, if you encounter medical, emotional, or other personal problems that affect your attendance or academic performance, please notify me as soon as possible, as well as your Faculty Academic Advising Office. Please refer to the UBC Calendar for a discussion of academic concession.

The University accommodates students with disabilities who have registered with the Access & Diversity office (see below). The University also accommodates students whose religious obligations conflict with attendance or scheduled exams. Please let me know in advance, preferably in the first few weeks of class, if you will require any accommodation on these grounds. Other absences (e.g., varsity athletics, family obligations or similar) are not part of University policy and you should not assume they will be accommodated. Please discuss this with me before the withdrawal dates (see above).

> **Centre for Accessibility.** UBC is committed to equal opportunity in education for all students includ--ing those with documented physical or learning disabilities. If you believe you fall in this category, please visit the website for the Centre for Accessibility (https://students.ubc.ca/about-student-services/centre-for-accessibility) to take the necessary steps to ensure that you have every opportunity that you deserve to excel in your studies.

Early Alert Program. I participate in the Early Alert program, which helps me support students who are facing difficulties that are interfering with their education, their wellness or both. For answers to frequently asked questions regarding the early alert program, please visit <u>blog.students.ubc.ca/earlyalert/information-for-students/students-frequent-</u> ly-asked-questions/.

Credit/D/Fail Grading. This course is eligible for Credit/D/Fail grading. The last day to change between Credit/D/Fail and percentage grading is **Sep 24**.

UNIVERSITY POLICIES

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions.

Details of the policies and how to access support are available on the <u>UBC Senate website</u>.

OTHER COURSE POLICIES

Office Hours. Your TAs will offer one or more time windows for you to review each of your exams. If you would like to review your exam, you must plan to attend one of these sessions or your make an appointment with one of your TAs. When reviewing your exam, you are not allowed to take notes on, or photos of, the exam. You should also connect with your TA if you would like to discuss textbook content (not lecture content) and/or study strategies, or you would like to discuss psychology and neuroscience more generally.

You should consider visiting my office hour if you would like to discuss lecture content (or psychology and neuroscience more generally) or if you have an issue with course performance or progress (e.g., you would like to discuss your exam performance after meeting with your TA or you missed an exam due to illness or some other adverse situation).

Classroom Conduct. Our classroom is a place where you should feel safe and respected. It should also be a place that is conducive to learning and intellectual inquiry. Any behaviour on your part that compromises that environment will not be tolerated and you will be asked to leave.

Copyright. All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline. Recording of lectures is not permitted without my explicit permission.

POINTS TO REMEMBER

- There are 22 classes and 17 chapters will be covered during the course. This means there will usually only be 1 lecture per chapter--plan your reading and studying accordingly.
- Productive classroom discussion and debate are encouraged.
- Lectures will typically focus on particularly important and/ or interesting ideas. You are responsible for all text and lecture materials.
- Lecture slides will be available on the course website. However, if you miss a lecture, don't expect to find all of what you missed in the slides.
- Lecture slides will be posted on the course website the night before each lecture. This is done as a courtesy. Please

be aware that I may make some significant changes to the slides between that time and the lecture the next day. Final versions of lecture slides will be posted no later than the Friday following a lecture, and will be marked as '*Final Version*.'

- Please be aware that the first quarter of the course can be especially challenging to those without some background in biology.
- It is worth devoting extra time to the materials in chapters 1-5 of the textbook, as they are foundational to the rest of the course.
- Laptops and similar devices can be effective learning tools and are welcome in class. However, if you are using them for non-class-related activities it can be distracting for others. So, if you plan to use devices for any non-class-related activities, please sit towards the back of the room.

ACADEMIC MISCONDUCT

Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the University and the Department of Psychology. In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating or plagiarism may result in a zero credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to the student's transcript.

All graded work in this course, unless otherwise specified, is to be original work done independently by individuals. If you have any questions as to whether what you are doing is even a borderline case of academic misconduct, please consult with me. For details on pertinent University policies and procedures, please see Chapter 5 in the UBC Calendar (<u>students.ubc.ca/calendar</u>) and read the University's Policy 69 (available at <u>universitycounsel.ubc.ca/policies/policy69.html</u>).

Last Modified: September 2, 2019