# PSYCHOLOGY 304-901: BRAIN & BEHAVIOUR Summer 2022

#### ABOUT PSYCH 304:

Psychology 304 surveys the major topic areas in behavioural neuroscience. In this course, we will take a journey through learning how biological brain processes orchestrate the expression complex behaviours and integrate perception of the world around us. Once we gain an understanding of the basic tenets of biopsychology, we will explore how disruptions of normal brain function can result in pathologies like addiction, schizophrenia, anxiety, and depression.

#### TIME & LOCATION:

Tuesdays & Thursdays from 6:30PM to 9:30PM in BUCH A102

#### **INSTRUCTOR:**

Dr. Tristan Hynes, PhD thynes@psych.ubc.ca Office hours by appointment (tristanhynes.youcanbook.me)

I will aim to respond to emails within 24 hours of receiving them, though my response during weekends and holidays may be delayed. Please use your UBC e-mail when contacting me and cite the course in the subject line (PSYC 304-901). You should contact me if you would like to a) discuss lecture content, b) discuss your course performance or progress, or c) discuss psychology and neuroscience in general. If you would like to review your exams, please contact your TAs.

#### **TEACHING ASSISTANTS:**

Arezoo Shahnaz arezoo.shahnaz@psych.ubc.ca

Tianxin Wang twang@psych.ubc.ca

Mudhi Zhao mzhao@psych.ubc.ca

### MANDATORY TEXTBOOK:

Pinel, John R. and Stephen Barnes. *Revel for Biopsychology* 11<sup>th</sup> Edition Access Card. ©2021. Pearson. ISBN: 9780135685341. Link to join: https://console.pearson.com/enrollment/igalzc

### **ONLINE RESOURCES:**

We will be using Canvas (canvas.ubc.ca) only for the posting of lecture slides and grades. All contact with the instructor and TAs should be via your UBC e-mail to their UBC e-mail.

### **EVALUATION:**

Exam 1 (10%) – June 7 (in-class) Exam 2 (35%) – June 26-30 (exact date/time determined by the Registrar's Office) Exam 3 (20%) – July 21 (in-class) Exam 4 (35%) – August 15-19 (exact date/time determined by the Registrar's Office)

The exams will NOT be cumulative, but new topics will often integrate previously learned concepts. You will be tested on all information presented in lecture and written in the assigned chapters of the textbook. During some classes, I will assign an inspiring journal article, which will also be tested on exams.

Research participation (up to 3% bonus): You may 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 ubc-psych.sona-systems.com, or by completing library writing projects (please see the HSP website). If you plan to earn extra credit through research participation, please register in this online system as soon as possible, as the participation window closes (you can find more details at psych.ubc.ca/undergraduate/human-subject-pool).

COURSE SCHEDULE & CONTENT (TENTATIVE):	

Date	Торіс	Assigned Reading*
May 17 <sup>th</sup>	Course introduction & overview	Syllabus
May 19 <sup>th</sup>	Introduction to biopsychology	Chapter 1
May 24 <sup>th</sup>	Evolution, genetics, & experience - *self-directed*	Chapter 2
May 26 <sup>th</sup>	Neuroanatomy	Chapter 3
May 31 <sup>st</sup>	Neural conduction & transmission	Chapter 4
June 3 <sup>rd</sup>	Research methods in biopsychology	Chapter 5
June 7 <sup>th</sup>	Exam 1 – in class	
June 9 <sup>th</sup>	Visual system	Chapter 6
June 14 <sup>th</sup>	Perception & conscious awareness	Chapter 7
June 16 <sup>th</sup>	Sensorimotor system	Chapter 8
June 21 <sup>st</sup>	Hormones & Sex	Chapter 13
June 23 <sup>rd</sup>	Exam Review	
July 5 <sup>th</sup>	Brain dysfunction & neuroplasticity	Chapter 10
July 7 <sup>th</sup>	Hunger, eating, & health	Chapter 12
July 12 <sup>th</sup>	Learning, memory, & amnesia	Chapter 11
July 14 <sup>th</sup>	Sleep, dreaming, & circadian rhythms	Chapter 14
July 19 <sup>th</sup>	Drug addiction & brain reward systems	Chapter 15
July 21 <sup>st</sup>	Exam 3 – in class	
July 26 <sup>th</sup>	Drug addiction & brain reward systems	Chapter 15
July 28 <sup>th</sup>	Drug addiction & brain reward systems	Chapter 15
August 2 <sup>nd</sup>	Psychiatric disorders	Chapter 18
August 4 <sup>th</sup>	Psychiatric disorders	Chapter 18
August 9 <sup>th</sup>	Psychiatric disorders	Chapter 18
August 11 <sup>th</sup>	Exam Review	

\*Assigned reading from textbook. Papers may be assigned on an *ad hoc* basis.

#### **GRADING:**

Your grades for exams will be sent to you via Canvas. If you wish to inspect your exams, you may do so by meeting with your TA. 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 to comply with these norms. Grades may be scaled up or down as necessary by the instructors 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:

<b>A+</b> : 90-100%	<b>A</b> : 85-89%	<b>A-</b> : 80-84%
<b>B+</b> : 76-79%	<b>B</b> : 72-75%	<b>B-</b> : 68-71%
<b>C+</b> : 64-67%	<b>C</b> : 60-63%	<b>C-</b> : 55-59%
<b>D</b> : 50-54%	<b>F</b> : 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 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.

During your time in this course, if you encounter medical, emotional, or other personal problems that affect your attendance or academic performance, please notify us 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, by **May 18<sup>th</sup>**, **2022**, if you will require any accommodation on these grounds. Other absences (e.g., varsity athletics, family obligations, or similar) are not part of the university policy and you should not assume they will be accommodated. Please discuss this with me before **May 18<sup>th</sup>**, **2022**.

## **ACCESS & DIVERSITY:**

UBC is committed to equal opportunity in education for all students including those with documented physical or learning disabilities. If you believe you fall in this category, please visit the website for Access & Diversity (students.ubc.ca/about/access) to take the necessary steps to ensure that you have every opportunity that you deserve to excel in your studies.

# ACADEMIC MISCONDUCT:

Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the university, and the Department of Psychology has taken steps to alleviate them. 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 us. For details on pertinent University policies and procedures, please see Chapter 5 in the UBC Calendar (students.ubc.ca/calendar) and read the University's Policy 69 (available at universitycounsel.ubc.ca/policies/policy69.html).