

# PSYC 460 – BEHAVIOURAL NEUROENDOCRINOLOGY SYLLABUS

## INSTRUCTOR INFORMATION

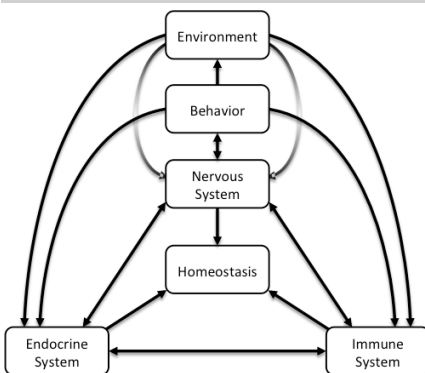
Instructor	E-mail	Office Location & Hours
Parker Holman, MS, MEd PhD Candidate (Neuroscience)	<a href="mailto:parker.holman@ubc.ca">parker.holman@ubc.ca</a> <i>Please write "PSYC 460" in Subject Line</i>	Life Sciences Centre, Rm. 3.302 Office Hours by Appointment

## GENERAL INFORMATION

- Tuesdays ..... 11am-12:30pm .....Centre for Brain Health (DMCBH) 3402A/B
- Thursdays ..... 11am-12:30pm .....Buchanan B315

Teaching Assistant	E-mail	Office Location & Hours
Brett Hathaway	<a href="mailto:bretthathaway@psych.ubc.ca">bretthathaway@psych.ubc.ca</a>	Office Hours by Appointment

## DESCRIPTION



Welcome to PSYC 460! This course focuses on the inter-relationships between the brain, the endocrine systems, and behaviour (see figure to the left). We will study the effects of many different hormones to gain an understanding of how hormonal signaling in the body and brain coordinates the incredible behavioural complexity observed in nature, specifically in humans and animal models. We will discuss the reciprocal nature of hormone and behaviour interactions on puberty, sexuality, stress, rhythms, and moods across development. In addition to the course textbook, we will use discussions of the primary literature to emphasize the current knowledge and limitations in the field.

## TEACHING PHILOSOPHY & TIPS FOR SUCCESS

My primary goal in the classroom is student engagement, and I strive to get you invested in the content by providing clear expectations, well-defined learning objectives, and consistent feedback, with the goal of fostering self-directed learning. During lectures, I will refer to the learning objectives explicitly and build in formative, in-class assessments to check for your understanding and keep you engaged with the lesson.

This course will include learning experiences using both **discussion (Tuesdays)** and **lecture (Thursdays)**. I really value your contributions to both lectures and discussions and expect you to come to each class prepared. Usually we will spend about one week per each major topic (see the Course Schedule later in this syllabus). To prepare, you should read the related material in the text **before** class. At the end of each chapter are the sections *Summary* and *Questions for Discussion*. These parts of the chapter are there to help you fully integrate and remember the material, and you should devote special care to them. I encourage you to prepare your answers to the *Questions for Discussion* after you finish reading the material to aid in your understanding of the material and to provide a review guide for later study. A substantial portion of the questions on examinations (described below) will come from the *Questions for Discussion*. You also should prepare your answers to the Learning Objectives, as these are fundamental to answering many examination questions as well.

## PREREQUISITES

- 4<sup>th</sup>-year standing
- PSYC 304 – “Brain & Behaviour”      OR      PSYC 360 – “Biopsychology”

## CLASS EXPECTATIONS

### Student Expectations

- PLEASE BE ACTIVE AND PARTICIPATE IN CLASS
- Listen and respect others
- Be comfortable taking risks
- Complete all assignments (on time)
- Limit cell phone / computer use to course-specific activities
- Be punctual for all classes
- Discuss class concerns either after class or during designated office hours
- Be prepared for class by completing assigned readings prior to lesson

### Instructor Expectations

- BE ACTIVE AND ENTHUSIASTIC TO FACILITATE STUDENT LEARNING
- Listen and respect students' views
- Mark objectively, consistently, and in a timely manner
- Accommodate differences in students' learning
- Limit cell phone / computer use to course-specific activities
- Be in class at least 5 minutes before and after class
- Respond swiftly and effectively to student concerns
- Be prepared for class

The most critical factor determining your success in any course is lecture attendance. Come to class, take detailed notes, and then review and outline the material presented. Attendance will be periodically recorded via iClicker, and you will do poorly in this course if you do not attend lectures and discussion group sessions.

Finally, come to me or your TA if you need help. Successful students are those who are not afraid to ask for help. You will enjoy the material much more if you understand it. Don't wait until it's too late to rectify the problem!

## GOALS

### Student Learning Objective

### Assessment(s)

- |   |  |
|---|--|
| 1. Demonstrate an understanding of the major hormonal mechanisms that underlie behaviour in animals.  | Informal in-class quizzes; midterm & final exams                                     |
| 2. Become a critical consumer of behavioural neuroendocrinological research by understanding a variety of methodological issues.  | Research article presentation; discussion group participation; midterm & final exams |
| 3. Be able to read, understand, and integrate research in behavioural neuroendocrinology.   | Research article presentation; reading quizzes; midterm & final exams                |
| 4. Be able to apply varying research methods to study behavioural neuroendocrinology across development.  | NSERC-style research proposal  |
| 5. Understand the ethical considerations involved when conducting research.   | Discussion group participation; research presentation                                |
| 6. Learn about the research process by conducting a literature review, formulating a developmental research question and hypothesis, designing methodology to test hypothesis, and writing NSERC-style research proposal. | NSERC-style research proposal  |

## COURSE MATERIALS

### REQUIRED TEXT

**An Introduction to Behavioral Endocrinology, Fifth Edition**, Nelson & Kriegsfeld (4<sup>th</sup> Edition is acceptable)

**Discussion Papers** as listed in the syllabus (posted on Connect)

### REQUIRED MATERIALS

- iClicker OR iClicker REEF subscription (w/ mobile device or laptop)

### OPTIONAL MATERIALS

Course outlines, lecture notes, and other materials relevant to the course will be available on Connect (<http://elearning.ubc.ca/connect/>). Please be aware that lecture notes may change such that some slides may be posted after classes. More resources are available for you at <http://guides.library.ubc.ca/psyc460>, a website created to help you find research on your topic for your oral presentation as well as your NSERC Discovery Grant assignment.

Textbook companion website: <http://sites.sinauer.com/be5e/index.html>

Short course content summary: <http://nobaproject.com/modules/hormones-behavior>

## COURSE ASSIGNMENTS

Component	Percentage of Final Mark	Due Date
In-Class & Reading Quizzes / Discussion Participation	10%	Cumulative
Midterm Exam	25%	Tuesday, Oct. 17, 2017 (Exam will be held in Buchanan B315)
Oral Presentation / Discussion Facilitator	15%	TBD (theme chosen in week 1; article approval required minimum 2 weeks prior to presentation)
NSERC Discovery Grant	20%	Thursday, Nov. 30, 2017 Topic selection due Tue., Oct. 3; <i>Optional: For written feedback, rough draft due Tue., Oct. 24</i>
Final Exam	25%	TBD

### QUIZZES / PARTICIPATION – (10%)

#### IClicker IN-CLASS QUIZZES

For lecture classes, we will have in-class quizzes using iClickers during *each* lecture. You will earn full credit for each lecture session if you answer **at least one question** correctly. Please make sure that there is not a malfunction with your iClicker. If you do suspect a malfunction, please see me *after class* so that I can make sure you receive credit for that session (i.e. I can only adjust your quiz mark on the day of the malfunction). I understand that special circumstances may arise that prevent you from attending lecture, so each student will receive a “freebie” absence (automatic, no note/e-mail/excuse required).

*Please note: Honesty is the best policy – if there is a discrepancy between the number of students present and the number of iClicker responses (i.e. more iClicker responses than students present), I will substitute iClicker questions for a written in-class quiz to determine who’s iClicker made it to class without its student.*

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## DISCUSSION GROUP READING QUIZZES & PARTICIPATION

One day of each week will rely on discussion (Tuesdays), so you will be marked based on your participation and overall contributions to small-group discussions. If I don't know your name by the end of the third week or so, you can assume that you have not been effectively participating. Further, you cannot participate effectively if you have not read each week's article; accordingly, there will be short, 3-5 question online reading quizzes each week before the discussion group to check your understanding of the assigned research/review article. Quizzes will be administered online through Connect, with each quiz opening on Sunday evening (5pm) and closing Tuesday morning at 10am. For reading quizzes, you will be marked for providing a correct/incorrect answer. Following student presentations, we will have discussion group activities for which you will receive participation marks for attending/participating (i.e. you must be present to earn points). As with in-class quizzes, each student will receive a "freebie" absence (automatic, no note/e-mail/excuse required) for discussion days. If you are present for all discussion groups, you may use this "freebie" to drop your lowest reading quiz mark.

*Please make class attendance a priority as additional requests (above and beyond "freebie" excuses) to excuse absence-related participation/quiz marks will not be granted, regardless of any extenuating circumstances (e.g. illness, course conflicts, etc.).*

## MIDTERM & FINAL EXAMS (50%)

The midterm exam (Thursday, Oct. 12, 2017) will cover all material prior to the date of the exam. You are expected to know material from class lectures, your reading of the text, as well as assigned research articles. Some examination questions will come exclusively from class lectures, some will come exclusively from your reading, and some will come from material that has been covered in multiple formats (e.g., class and reading). Examination questions will come extensively from lecture learning objectives, in-class quizzes, and *Questions for Discussion* at the end of each chapter of the textbook. The format of the examinations will be multiple choice and short answer/essays. The final examination will have the same format. The final exam (date TBD) will have questions from course material covered after the midterm exam.

You should let me know as soon as you realize you might miss an exam. You will be able to take a missed examination only if you have a documented and compelling reason for your absence during the exam – please refer to the *Departmental Policy on Missed Tests and Extensions* (below) for more information. *Make-up exams will consist of an oral exam to be conducted in the presence of the professor and the teaching assistant.*

## ORAL PRESENTATION / DISCUSSION GROUP FACILITATOR – (15%)

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### ORAL PRESENTATION

There will be 9 discussion groups during the term, with ~5-6 oral presentations per date. Each student will give an **8-minute presentation** (6-minute PowerPoint presentation plus 2 minutes for discussion and questions) about one research paper related to the weekly theme. You have two options for selecting a *recent* (published in 2013 or later) research article: 1) pick a research article that is cited by the weekly discussion paper OR 2) select a recent paper that examines an advanced topic related to the weekly theme (see *Potential Topics* below; you may select a paper/topic not listed). Review articles are not acceptable. You must e-mail me at least 2 weeks prior to your presentation for topic/article approval.

For the presentation, you should aim to present approximately one slide per minute (~6 slides in this case). Please practice your talk ahead of time (more than once!) – this is a critical part of giving a good talk and is also essential for making sure you keep to time. I understand that many students become anxious before giving a presentation, but don't panic! Most (if not all) professors become anxious as well – but it gets better with practice. On the day of your talk, please e-mail me your PowerPoint presentation no later than 10am (Mac users: please ensure PC-compatibility). The marking scheme/rubric is included at the end of the syllabus for your reference.

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## SUGGESTED FORMAT FOR JOURNAL ARTICLE POWERPOINT PRESENTATION

### 1. Title slide

- a. Article title
- b. Author(s)
- c. Presented by – Your name

### 2. Introduction Slide

- a. *Purpose of research* (So what?)
- b. Summary of research
- c. How does your paper relate to the week's theme?

### 3. Background Slide

- a. What *course concepts/ideas* help us understand this article?
- b. How does this research article fit into the larger behavioural neuroendocrinology literature?

### 4. Problem/Hypothesis Slide\*\*\*\*

- a. What problem was the experimenter trying to solve?
- b. What was the *hypothesis*?

### 5. Methodology Slide

- a. Experimental design (control groups, statistical methods, etc.)
- b. Key methodology/technique(s)
- c. *Design figure/flowchart that summarizes the methodology*

### 6. Data Slide

- a. Charts, Graphs, pictures, etc.
- b. Try to pick *1-2 figures* that really drive home the thesis of the research article

### 7. Discussion & Conclusion Slide\*\*\*\*

- a. Analysis of the data
- b. What do the data show?
- c. Was the hypothesis correct?
- d. Criticisms? (please don't just say "larger sample size")
- e. Based on the results, what experiment would you do next?

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## DISCUSSION QUESTIONS / DISCUSSION FACILITATOR

Additionally, you will be required to submit to me by e-mail *no later than 10 pm on the Sunday before your presentation* (on Tuesday) **two discussion questions with sample answers** regarding your research paper and its relation to the weekly theme. A good question is both a question that your fellow students can answer and a question that requires analysis, synthesis, interpretation, and critical thinking to answer it. Discussion questions based on your presentation should both encourage and challenge us to articulate and uncover important course concepts. For your questions, think big picture – the goal is to help guide our conversations about the weekly theme. You don't necessarily have to have THE answer to your question (indeed the most interesting questions often don't have a definitive answer), but you should think in advance about the kinds of answers your question may elicit in class. Each discussion group, presenters will also serve as discussion group facilitators to help us respond to a series of pre-selected discussion questions. As such, I encourage each week's group of presenters to work together to formulate their discussion questions (though this is not required).

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## TIPS FOR WRITING GOOD DISCUSSION QUESTIONS

Here are some types of *effective* discussion questions (i.e. tend to facilitate thoughtful, sustained discussions):

Type	Example(s)
Analysis	Questions beginning with "Why..." "How would you explain..." "What is the importance of..." "What is the meaning of" <i>How does a specific technique used in the research article help us investigate sex differences?</i>
Compare & Contrast	"Compare..." "Contrast..." "What is the difference between..." "What is the similarity between..." <i>Explain how the findings of [x] study conflict with information in the textbook?</i>
Cause and Effect	"What are the causes/results of..." "What connection is there between..." <i>Given the results of your research article, how does this change our understanding of oxytocin's hormone's role in social behaviour function?</i>
Clarification	"What is meant by..." "Explain how..." <i>What is meant by the term "fetal programming" in the context of the research article?</i>

Here are some types of *ineffective* discussion questions (i.e. can lead to dead ends in discussion):

Type	Example(s)
Yes / No	Yes/no questions produce little discussion and encourage guessing. <i>Does [x] technique help us investigate sex differences better than [y] technique?</i>
Elliptical	Elliptical questions are too vague; it is not clear what is being asked." <i>What do you think about social behaviour and aggression?</i>
Leading	Leading questions convey the expected answer. <i>What hormone did the authors suggest was important for hunger?</i>
Slanted	"What is meant by..." "Explain how..." <i>Why is optogenetic research better than epigenetic research?</i>

## RESEARCH PROPOSAL – (20%)

The final assignment is a paper describing an original research proposal that is of interest to you and related to any topic covered in the course. Some of you may find it helpful to choose the same topic you presented for your oral presentation. You will propose a coherent set of experiments that build on what is already known, but that will contribute new and useful information to the field. More information about specific components to include are listed below. Of course, **use your own words** (we will utilize *TurnItIn.com*, a service designed to detect and deter plagiarism; more information on academic misconduct can be found at the end of the syllabus).

**A hardcopy of this assignment is due on the last day of class (Thursday, Nov. 30).** You must also upload your paper to TurnItIn.com to generate an Originality Report (Class ID: 15975638; Enrolment Key: PSYC4602017!). Please note you can utilize this feature at any point during the term to help make sure that you're using your own words; I will only utilize the *final* Originality Report as part of your assessment. If you would like written feedback, you can submit a rough draft to me via e-mail (due no later than Tuesday, Oct. 24).

## STRUCTURE OF RESEARCH PROPOSAL

5 pages maximum, single spaced, including figures (if any). 2 additional pages for references (APA format). All text should be in 12 pt Arial font, and margins must be set at a *minimum* of  $\frac{3}{4}$ " (1.87 cm). Your name and student ID must appear outside the set margins of the page, at the top right corner of every page (please submit a redacted version to *TurnItIn.com* to be FIPPA compliant). Follow the NSERC Discovery Grant guidelines ([http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/DGIGP-PSIGP\\_eng.asp](http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/DGIGP-PSIGP_eng.asp)); pretend that you are asking for 5 years of funding. Specifically, your proposal should include the following sections/information:

### 1. Abstract / Lay Summary (1 page max)

- a. This section must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained description of the project and should contain a statement of objectives and methods to be employed. It should be informative to other persons working in the same or related fields and insofar as possible understandable to a scientifically or technically literate lay reader.

### 2. Objectives / Specific Aims

- a. Define 2-4 major objectives of your research program – these are the steps to answer your central question(s).
  - i. For each objective/aim, genuine, testable, null hypotheses are important and each of these aims should have a concluding statement describing how you will know when you have the answer, and what it will mean to the program.

- b. Discuss potential problems, limitations, alternative strategies, and benchmarks for success anticipated to achieve the aims.

### 3. Background / Literature review

- a. Discuss the literature pertinent to the proposal, placing the proposed research in the context of the state-of-the-art.
- b. Space will not permit a comprehensive literature survey, and you will be unable to include many references. That makes it all the more important to select judiciously, thereby demonstrating that you have solid knowledge of the field, and the ability and good taste to make the very best use of limited space.
- c. Make sure your literature review is up-to-date, including recent publications in the area.

### 4. Methodology

- a. Describe the methods and proposed approach, providing sufficient details to allow the reviewers to assess the feasibility of the research activities.
- b. Avoid going into the minutiae of the methodologies, but provide enough details to demonstrate how technique/methodology allows you to test your hypotheses.

### 5. Impact

- a. Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- b. Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
- c. Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

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## TIPS FOR A SUCCESSFUL RESEARCH PAPER

- **START EARLY** – This cannot be emphasized enough. Writing a research proposals is difficult; to put together even an adequate proposal requires a minimum of 3-4 drafts, and you need time to step away and reflect between each draft phase. If you get started too late in the game, it will be highly unlikely you'll be able to invest the necessary time/effort to craft a successful research proposal.
- **TAKE ADVANTAGE OF RESOURCES** – I have tried to provide enough detail about the format of the assignment to eliminate any superficial barriers to your success – please adhere to these requirements. Additionally, I have included a rubric for how you'll be evaluated and have offered access to TurnItIn for the entire term. Please utilize to these resources, as they can help you self-assess the quality of your work. I will be posting supplemental materials on Connect to help you write a successful research proposal, in addition to resources available at <http://guides.library.ubc.ca/psyc460>
- **GET FEEDBACK** – I really want this research proposal assignment to be a learning experience and not simply a summative assessment. Accordingly, I encourage you to submit a rough draft to me for written feedback (*rough draft due no later than Tuesday, Oct. 24*). Ideally, you would submit a working draft of the full proposal, but don't be afraid to submit even a rough outline (or better, your 1-page Abstract & Lay Summary with specific aims!).
- **KEEP IT CLEAR, CONSISTENT, COMPLETE, & COMPELLING** – Start with your major research question and then decide on the "take-home" message of the proposal. Don't be afraid to repeat yourself, especially as you try to tie all of your specific aims and methodologies back to your central research question. Likewise, don't make me hunt for important content: highlight/bold key hypotheses, techniques, or research questions. Finally, avoid unhelpful use of jargon, buzzwords, acronyms, clichés, or distracting prose which does not aid clear, precise communication of your ideas.

## COURSE SCHEDULE

Week	Date	Topic	Readings (Focus Pages)
<b>1</b>	<i>T</i> Sept. 5	<i>No Class (UBC Imagine Day)</i>	--
	Th Sept. 7	Syllabus & Course Overview	Syllabus
<b>2</b>	<i>T</i> Sept. 12	Introduction / Experimental Techniques	Chpt. 1 (1-30)
	Th Sept. 14	Endocrine Systems	Chpt. 2 (36-52; 58-85)
<b>3</b>	<i>T</i> Sept. 19	Discussion Group: Endocrine Systems	Patisaul & Belcher 2017
	Th Sept. 21	Sex Differences in Development	Chpt. 3 (87-109; 118-142)
<b>4</b>	<i>T</i> Sept. 26	Discussion Group: Sex Differences	McCarthy & Arnold 2011
	Th Sept. 28	Sex Differences in Behaviour	Chpt. 4 (143-159; Box 4.2; 168-201)
<b>5</b>	<i>T</i> Oct. 3	Discussion Group: Sex Differences in Behaviour	McCarthy et al. 2012
	Th Oct. 5	Parental Behaviours	Chpt. 7 (336-341; 349-390)
<b>6</b>	<i>T</i> Oct. 10	Discussion Group: Parental Behaviours	Feldman & Bakermans-Kranenburg 2017
	Th Oct. 12	Attachment	Sullivan et al. 2011
<b>7</b>	<b><i>T</i> Oct. 17</b>	<b>MIDTERM EXAM (Buchanan B315)</b>	--
	Th Oct. 19	Social Behaviours	Chpt. 8 (391-408; 410-414; 423-425; 428-431; 441-454)
<b>8</b>	<i>T</i> Oct. 24	Discussion Group: Social Behaviours	Harari-Dahan & Bernstein 2014
	Th Oct. 26	Homeostasis & Behaviour	Chpt. 9 (455-460; 473-493; 502-511) Chpt. 10 (529-553)
<b>9</b>	<i>T</i> Oct. 31	Discussion Group: Homeostasis & Behaviour	Berthoud et al. 2017
	Th Nov. 2	Stress I	Chpt. 11 (581-608)
<b>10</b>	<i>T</i> Nov. 7	Discussion Group: Stress I	Groeneweg et al. 2011
	<i>Th</i> Nov. 9	<i>** No Class (Society for Neuroscience) **</i>	--
<b>11</b>	<i>T</i> Nov. 14	<i>** No Class (Society for Neuroscience) **</i>	--
	Th Nov. 16	Stress II	Chpt. 11 (608-619; 622-628) Chpt. 12 (647-657)
<b>12</b>	<i>T</i> Nov. 21	Discussion Group: Stress II	Bilbo & Schwarz 2012
	Th Nov. 23	Developmental Origins of Health & Disease (DOHaD): Risk & Resilience	McEwen 2003; Van den Bergh et al. 2017
<b>13</b>	<i>T</i> Nov. 28	Discussion Group: DOHaD	Franklin 2012; Opendak et al. 2017
	Th Nov. 30	Review; NSERC Research Proposal Due	--

A more detailed description of course topics/themes, reading assignments, and key ideas can be found in the **Course Outline** document posted on Connect.



## POTENTIAL STUDENT PRESENTATION TOPICS

Please note that Discussion Groups will take place on Tuesdays in DMCBH 3402A/B; there are 5-6 slots per day for student presentations.

Week	Discussion Group Date	Theme	Discussion Paper	Potential Student Presentations
3	19-Sep	Endocrine Systems	Patisaul HB, Belcher SM (2017). The Neuroendocrine System and General Mechanisms of Endocrine Disruption. In: <i>Endocrine Disruptors, Brain, and Behavior</i> (Patisaul HB, Belcher SM, eds), pp 73–106. New York: Oxford University Press.	Cushing's Syndrome Hypothyroidism Hyperthyroidism Dysthymic Disorder Adrenal Insufficiency Prader Willi Neuroinflammation
4	26-Sep	Sex Differences in Development	McCarthy MM, Arnold AP (2011). Reframing sexual differentiation of the brain. <i>Nature Neuroscience</i> . 14:677–683.	Andropause Premenstrual Dysphoria Disorder Menopause Genetic Mutations Adolescent Risk Taking Intersex Gender Dysphoria Ambiguous Genitalia
5	3-Oct	Sex Differences in Behaviour	McCarthy MM, Arnold AP, Ball GF, Blaustein JD, De Vries GJ (2012) Sex differences in the brain: the not so inconvenient truth. <i>Journal of Neuroscience</i> . 32:2241–2247.	Aggression Learning & Memory Reward Anxiety-like Behaviour Depressive-like Behaviour Bipolar Disorder Anabolic Steroid Abuse Premenstrual Dysphoric Disorder Cognition – Behaviour Cognition – Neurocircuitry Lateralization
6	10-Oct	Parental Behaviours	Feldman R, Bakermans-Kranenburg MJ (2017). Oxytocin: a parenting hormone. <i>Current Opinion in Psychology</i> . 15:13–18.	Postpartum Depression Insufficient Milk Production Maladaptive Attachment Reactive Attachment Disorder Child Abuse / Trauma Neglect
8	24-Oct	Social Behaviours	Harari-Dahan O, Bernstein A (2014). A general approach-avoidance hypothesis of Oxytocin: Accounting for social and non-social effects of oxytocin. <i>Neuroscience &amp; Biobehavioral Reviews</i> . 47:506–519.	Autism Spectrum Disorders Fetal Alcohol Spectrum Disorders Social Anxiety Disorder Alcohol/Substance Abuse Antisocial Behaviour
9	31-Oct	Homeostasis & Behaviour	Berthoud HR, Münzberg H, Morrison CD (2017). Blaming the Brain for Obesity: Integration of Hedonic and Homeostatic Mechanisms. <i>Gastroenterology</i> . 152:1728–1738.	Anorexia Nervosa Bulimia Nervosa Eating Disorders Seasonal Affective Disorder Polydipsia Circadian Rhythm Sleep-Wake Disorder Insomnia
10	7-Nov	Stress I	Groeneweg FL, Karst H, de Kloet ER, Joels M (2011). Rapid non-genomic effects of corticosteroids and their role in the central stress response. <i>Journal of Endocrinology</i> . 209:153–167.	Major Depressive Disorder Post-Traumatic Stress Disorder Generalized Anxiety Disorder Anxiety Depression
12	21-Nov	Stress II	Bilbo SD, Schwarz JM (2012). The immune system and developmental programming of brain and behavior. <i>Frontiers in Neuroendocrinology</i> . 33:267–286.	Addiction & Stress ADHD Obsessive-Compulsive Personality Disorder Borderline Personality Disorder Schizophrenia
13	28-Nov	Developmental Origins of Health & Disease (DOHaD)	Franklin TB, Saab BJ, Mansuy IM (2012). Neural Mechanisms of Stress Resilience and Vulnerability. <i>Neuron</i> . 75:747–761. Opendak M, Gould E, Sullivan R (2017). Early life adversity during the infant sensitive period for attachment: Programming of behavioral neurobiology of threat processing and social behavior. <i>Developmental Cognitive Neuroscience</i> . 25:145–159.	Neurodevelopmental Disorders Maternal Stress Transgenerational Effects of Stress Resilience Endocrine Disruptors Paternal Alcohol Exposure

## ADDITIONAL INFORMATION AND RESOURCES

### AUDIO/VIDEO RECORDING POLICY

Students may request permission to record any lectures or other formal teaching sessions. All such requests should be made in writing (including by email) prior to the lecture course or equivalent, to the instructor. The decision on whether to grant permission is at the discretion of the instructor; recording a lecture also requires the observation of privacy guidelines and regulations for students in the class whose presence or statements might also be recorded. Students may only record lectures where the instructor for the session has given their consent prior to the start of the lecture in writing (e.g. by email), and students may not make recordings of lectures unless this consent has been given. Retrospective requests are not permissible under this policy and covert recording of lectures will be treated as a disciplinary offence. Recordings of lectures or other formal teaching sessions may only be made for the personal and private use of the student. As such, students may not publish such recordings in any form (this includes, but is not limited to, the internet and hard copy publication). Students creating unauthorized recording violate an instructor's intellectual property rights and the Canadian Copyright Act and will be subject to disciplinary actions.

### DEPARTMENTAL POLICY ON MISSED TESTS AND EXTENSIONS

Make-up tests will only be given for validated medical reasons. If you submit medical documentation, make sure it contains the statement, "This student was unable to write the test (or submit term work by the last day of classes, if applicable) on (date) for medical reasons." You are advised to see your physician within one day of the missed test. Many physicians will not provide documentation retroactively. In the absence of such written verification you will not be excused. All medical excuses must be personally presented to the professor as soon as you are able to return to class for a make up to be scheduled. ***Make-up exams will consist of an oral exam to be conducted in the presence of the professor and the teaching assistant.*** In the interest of fairness to your classmates and to allow sufficient time to evaluate thoroughly research proposals, NO extensions for the research paper will be given past the due date except in *exceptional* circumstances. Papers submitted after 12:30pm on Nov. 30 will be penalized 5% per calendar day. Late papers will not receive credit after Dec. 7.

### PSYCHOLOGY DEPARTMENT'S POSITION ON 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 the first place, the Department has implemented software that can reliably detect cheating on multiple-choice exams by analyzing the patterns of students' responses. In addition, the Department subscribes to TurnItIn.com – a service designed to detect plagiarism. All materials (term papers, lab reports) that students submit for grading will be scanned and compared to over 4.5 billion pages of content located on the Internet or in TurnItIn's own proprietary databases. The results of these comparisons are compiled into customized "Originality Reports" containing several sensitive measures of plagiarism; instructors receive copies of these reports for every student in their class.

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 a 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 or not what you are doing is even a borderline case of academic misconduct, please consult your instructor. For details on pertinent University policies and procedures, please see Chapter 5 in the UBC Calendar (<http://students.ubc.ca/calendar>) and read the University's Policy 69 (available at <http://www.universitycounsel.ubc.ca/policies/policy69.html>).

## SPECIAL ACCOMODATIONS

The University accommodates students with disabilities who have registered with the **Disability Resource Centre**. The University accommodates students whose religious obligations conflict with attendance, submitting assignments, or completing scheduled tests and examinations. Please let your instructor know in advance, preferably in the first week of class, if you will require any accommodation on these grounds. Students who plan to be absent for varsity athletics, family obligations, or other similar commitments, cannot assume they will be accommodated, and should discuss their commitments with the instructor before the drop date.

## EXAM REVIEW

Students have the right to view their marked examinations with their TA, providing they apply to do so within a month of receiving their final grades. This review is for pedagogic purposes. The examination remains the property of the university.

## UBC & PSYCHOLOGY DEPARTMENT'S POLICY ON GRADE DISTRIBUTIONS AND SCALING

Faculties, departments and schools reserve the right to scale grades in order to maintain equity among sections and conformity to university, faculty, department or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department or school. Grades are not official until they appear on a student's academic record.

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. According to departmental norms, the mean grade in a 400-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). The corresponding figures for 100- and 200-level Psychology courses are 67, 65, and 63, with a standard deviation of 14. Scaling is likely to be used in order to comply with these norms; grades may be scaled up or down as necessary by the professor or department.

## ADDITIONAL INFORMATION

Further information about academic regulations, course withdrawal dates and credits can be found in the University Calendar. You are encouraged to read this material. If you run into trouble and need information about studying, preparing for exams, note taking or time management, free workshops and advice are available from the Student Resources Centre, which can be reached through the School and College Liaison Office at 822-4319 and from Student Success, <http://www.students.ubc.ca/success/>.

## SYLLABUS REFERENCES

Cargill M, O'Connor P. (2013). *Writing scientific research articles: Strategy and steps* (2<sup>nd</sup> ed.). West Sussex, UK: Wiley-Blackwell.

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Richmond AS. (2016). Constructing a learner-centered syllabus: One professor's journey. *IDEA*, #60, 1-14.

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