

PSYC 360 – BIOPSYCHOLOGY 2014-2015

COURSE ESSENTIALS

When: Tuesday & Thursday 9:30 – 10:50am

Where: Term 1: Buchanan A203, Term 2: Buchanan A102

Instructors: Jason Snyder (Term 1)
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Kenny Psychology Building room 3517
Office hours: by appointment

Dwayne Hamson (Term 2)
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TA: Paul Cocker → → see photo →→→→→
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Kenny Psychology Building room 3514
Office hours: by appointment



Website: See connect.ubc.ca - Here I will post lecture outlines, the course schedule and any updates or changes, grades, supplementary links and readings. Check regularly.

Textbooks: *[required]* Pinel, J.P.J. (2010). Biopsychology, 9th Edition.

--the course will largely be based off of the material in this text

--online and supplemental components of this text are non-essential

--use 8th edition at own risk (though appears very similar to 9th edition)

[supplementary] Kandel, E.R. et al., Principles of Neural Science

--I will supplement the course with biological and physiological content from this text

--this text is very extensive, heavy and expensive. Older editions are cheaper and still excellent resources. Highly recommended if you have a serious interest in neuroscience.

COURSE GOALS

PSYC 360 will provide you with a broad understanding of the role of the brain in producing all major aspects of behaviour. You will learn about the cellular and synaptic properties of the nervous system, their physiological functions, the networks neurons form with one another, the behavioral functions of the various brain regions and the ways that the environment stimulates the brain to produce behaviour. The current state of the biopsychology field is the result of many years of research on human psychology, animal behaviour, neuroscience, disease, and computational modeling. These various concepts are highly interrelated and will reinforce each other throughout the course. The goal is that by the end of the course you will

know the 'big picture', from synapses and cells to complex behavior. I will regularly use classic and modern examples of neuroscience research to make my points because, a) they're fascinating, b) biopsychology principles are clearer when you know how they were discovered and, c) they illustrate the limitations and evolution of what we know about the brain. Other notes:

- lecture slides will be published online before class, may change at the last minute, and may be updated after class if content was added / fixed / clarified during class (i.e. always check before a test that you have the latest content)
- feel free AT ANY POINT to ask questions, make observations, compliment my wardrobe etc.

EVALUATION

Performance will be evaluated with 4 exams – 2 midterm exams and 2 end of term final exams. Each exam will be 80min (i.e. same duration as class); exams will be weighted equally (each 25%); exams will not be cumulative, though later material will build on concepts covered earlier in the course. Test format will be a combination of 30 multiple choice questions and 6 short answer questions. Grades will be available on connect.ubc.ca. The Department of Psychology requires that class averages be 66-70%; grades may be scaled and are not official until they appear on your final academic record.

You are responsible for both the material covered in class as well as the material covered in the textbook (Pinel). The material covered in class should be your first study priority and you should focus on those areas of the text. However, remaining portions of the text provide important background and context for the lectures, and are also testable.

If you miss an exam you must notify me within 24hrs and provide a doctor's note that states that you were unable to attend, on the date in question, for medical reasons. We will then schedule a makeup exam.

Paul Cocker, the course TA, will grade the exams, will be available to review your exam with you, and will resolve the majority of grading issues that may arise.

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 – a service designed to detect and deter plagiarism. All materials (term papers, lab reports, etc.) 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>).

TERM 1 SCHEDULE:

Sept. 4	Course Intro
Sept. 9	Biopsychology overview (Ch. 1,2)
Sept. 11	Neuroanatomy (Ch. 3)
Sept. 16	Neuroanatomy (Ch. 3)
Sept. 18	Neuroanatomy (Ch. 3) / Cellular & Synaptic Neurophysiology (Ch. 4)
Sept. 23	Cellular & Synaptic Neurophysiology (Ch. 4)
Sept. 25	Cellular & Synaptic Neurophysiology (Ch. 4)
Sept. 30	Neural Circuits
Oct. 2	Biopsychology Research Methods (Ch. 5)
Oct. 7	Biopsychology Research Methods (Ch. 5)
Oct. 9	Biopsychology Research Methods (Ch. 5)
Oct. 14	Review session for midterm exam
Oct. 16	Midterm Exam
Oct. 21	The Visual System (Ch. 6)
Oct. 23	The Visual System (Ch. 6)
Oct. 28	The Visual System (Ch. 6)
Oct. 30	The Visual System (Ch. 6)
Nov. 4	Auditory & Vestibular Systems (Ch. 7)
Nov. 6	Somatosensory System (Ch. 7)
Nov. 11	<i>No class (Remembrance Day)</i>
Nov. 13	Chemical Senses (Ch. 7) / Sensorimotor System (Ch. 8; Paul Cocker guest lecture)
Nov. 18	Sensorimotor System (Ch. 8; Paul Cocker guest lecture)
Nov. 20	Neural Development (Ch. 9)
Nov. 25	Neural Development (Ch. 9)
Nov. 27	Review session for December exam
Dec. 2-17	December Exam

TERM 2 SCHEDULE:

Jan. 6	Brain Damage and Neuroplasticity (Ch. 10)
Jan. 8	Brain Damage and Neuroplasticity (Ch. 10)
Jan. 13	Learning, Memory and Amnesia (Ch. 11)
Jan. 15	Learning, Memory and Amnesia (Ch. 11)
Jan. 20	Learning, Memory and Amnesia (Ch. 11)
Jan. 22	Sleep, Dreaming and Circadian Rhythms (Ch. 14)
Jan. 27	Sleep, Dreaming and Circadian Rhythms (Ch. 14)
Jan. 29	Hormones and Sex (Ch. 13)
Feb. 3	Hormones and Sex (Ch. 13)
Feb. 5	Hormones and Sex (Ch. 13)
Feb. 10	Review session for midterm exam
Feb. 12	Midterm exam
<i>Feb. 16-20</i>	<i>No class</i>
Feb. 24	Hunger, Eating and Health (Ch. 12)
Feb. 26	Hunger, Eating and Health (Ch. 12)
Mar. 3	Drug Addiction and the Brain's Reward Circuits (Ch. 15)
Mar. 5	Drug Addiction and the Brain's Reward Circuits (Ch. 15)
Mar. 10	Lateralization, Language, and the Split Brain (Ch. 16)
Mar. 12	Lateralization, Language, and the Split Brain (Ch. 16)
Mar. 17	Emotion, Stress, and Health (Ch. 17)
Mar. 19	Emotion, Stress, and Health (Ch. 17)
Mar. 24	Emotion, Stress, and Health (Ch. 17)
Mar. 26	Psychiatric Disorders (Ch. 18)
Mar. 31	Psychiatric Disorders (Ch. 18)
Apr. 2	Psychiatric Disorders (Ch. 18)
Apr. 7	Review session for final exam
Apr. 14-29	Final Exam