

School of Arts & Science PSYCHOLOGY DEPARTMENT PSYC 215

Biological Psychology

Quarter or Semester/Year

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/psyc.html

Ω Please note: the College electronically stores this outline for five (5) years only. It is strongly recommended you keep a copy of this outline with your academic records. You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Michael Pollock	
(b)	Office Hours:	Mondays to Thursdays at 1:30pm to 2:20pm, or by appointment	
(c)	Location:	Fisher 308B	
(d)	Phone:	250-370-3111	Alternative Phone:
(e)	Email:	pollockm@camosun.bc.ca	
(f)	Website:	D2L	

2. Intended Learning Outcomes

Upon completion of this course the student will be able to:

- 1. Summarize the history of biopsychology, and the relationship of biopsychological theories and methods to the broader field of psychology.
- 2. Compare the most important research methods used in biopsychology.
- 3. Discuss the basic concepts, supporting the evidence for the interaction of evolution, genetics and experience in the development of behaviour.
- 4. Label and summarize the basic structures and functions of the human nervous system.
- 5. Explain the processes involved in neural conduction and synaptic transmission.
- 6. Label images of the human visual system and explain basic visual processes in the central nervous system.
- 7. Discuss the mechanisms of perception, consciousness, awareness and attention.
- 8. Describe the functioning of the human sensorimotor system.
- Summarize the processes involved in the development of the human nervous system and the
 ways in which the human brain attempts to cope with brain damage with an emphasis on
 neuroplasticity.
- 10. Discuss human learning, memory and amnesia as they relate to the human brain.
- 11. Summarize human sexual development, human sexual dimorphism and the effects of hormones on human development and behaviour.
- 12. Describe a model of drug addiction and a general model of the effects of various drugs on the neuronal function.
- 13. Discuss various disorders of cognition and emotion with regard to the human brain.
- 14. Summarize the effects of stress and emotions on human neurophysiology.
- Discuss the neurophysiology of schizophrenia, depression and anxiety and attempts to treat these disorders.

3. Required Materials

Text: Pinel, John P. J. (2011). Biological psychology. (8th ed.). Toronto: Allyn & Bacon.

4. Course Content and Schedule

Course Content:

This course familiarizes students with the major findings and issues associated with biopsychology. The first part of the course will examine the fundamentals of neurophysiology, neuropharmacology, neuroanatomy, genetics, and evolution. The rest of the course will focus on how these biological fundamentals are applied to the study of biopsychological phenomena, including sensation, perception, action, development, neuroplasticity, learning, memory, hunger, sex, sleep, dreams, reward pathways, addiction, emotions, and mental disorders. Lectures will not only cover material presented in the assigned readings but will also show how to apply this information to real-life situations and will evaluate the practical

significance of reported effects with in-class demonstrations whenever possible. In addition, in order to make learning of the material as interesting as possible, questions will be posed in class in a fun and engaging environment.

	COURSE SCHEDULE				
Date	Lecture#	Lecture topic	Readings	Assignment due in lab	
Sep 4		Introduction, course outline, and tips for studying			
Sep 11	1	Biopsychology and its methods	Chapters 1&5	Research question	
Sep 18	2	Neurophysiology and neuropharmacology	Chapter 4		
Sep 25	3	Neuroanatomy and lateralization	Chapters 3&16		
Oct 2	4	Evolution and genetics	Chapter 2		
Oct 9		Midterm exam			
Oct 16	5	Sensation and perception	Chapters 6&7	Answer to research question	
Oct 23	6	Sensorimotor system	Chapter 8		
Oct 30	7	Development and neuroplasticity	Chapters 9&10	Scheduled individual presentations	
Nov 6	8	Learning and memory	Chapter 11	Scheduled individual presentations	
Nov 13	9	Hunger and sex	Chapters 12&13	Scheduled individual presentations	
Nov 20	10	Sleep and dreams	Chapter 14	Scheduled individual presentations	
Nov 27	12	Reward pathways, addiction, and emotions	Chapters 15&17	Poster session	
Dec 4	13	Psychiatric disorders	Chapter 18		
TBA		Final exam			

5. Basis of Student Assessment (Weighting)

Your course grade will be based on the total number of points you receive on examinations, quizzes, and an assignment, in addition to opportunities in class for bonus points. Each of these components of your course grade is described in detail below. You can check with the instructor at any time during the semester for your current class standing and you are invited to discuss any concerns about your grade.

Each requirement will receive the following weight in determining your final grade:

Midterm Exam:20%Final Exam:40%Quizzes:20%Assignment:20%

6. Grading System

Standard Grading System (GPA)

Percenta	age Grade	Description	Grade Point Equivalency
90-10) A+		9
85-89	Α		8

80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description	
I	Incomplete: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.	
In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades we assigned for the same course. (For these courses a final grade will be assigned either the 3 rd course attempt or at the point of course completion.)		
cw	Compulsory Withdrawal: A temporary grade assigned by a Dean when an instru-	

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.

ADDITIONAL COMMENTS AS APPROPRIATE OR AS REQUIRED