

School of Arts & Science PSYCHOLOGY DEPARTMENT PSYC 215 Biological Psychology 2017F

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:	Dr. Michael Pollock		
(b)	Office Hours:	Mon-Thur 2:30-3:20		
(c)	Location:	Fisher 308B		
(d)	Phone:	250-370-3111	Alternative Phone:	
(e)	Email:	pollockm@camosun.ca		
(f)	Website:	http://online.camosun.ca	1	

2. Intended Learning Outcomes

(No changes are to be made to these Intended Learning Outcomes as approved by the Education Council of Camosun College.)

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.
- 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.
- 15. Discuss the neurophysiology of schizophrenia, depression and anxiety and attempts to treat these disorders.

3. Required Materials

(a) Text: Pinel, John P. J. (2014). Biopsychology. (9th ed.). Toronto: Pearson.

4. Course Content and Schedule

Course Description:

Neuroscience is a relatively new field of study, but could its findings eventually provide an explanation for all of our behavior by reducing our thoughts and feelings down to the workings of the brain? This course familiarizes students with the current major findings and limitations associated with biopsychology - the study of how biological knowledge can be applied to psychological topics. In the process of trying to understand the biological mechanisms of the mind, topics will range from the microscopic (e.g., genetics,

the electrophysiology of neurons, and neurochemistry) to the macroscopic (e.g., functional neuroanatomy and how the different parts of the nervous system interact). This course is a must for anyone interested in understanding the biological underpinnings of our minds.

		COURSE SCHEDULE		
Week	Date	Lecture	Assigned readings	
WK 1		Introduction & Course Overview		
	Sep 6 W W	Lab: Introduction and online quiz demonstration		
WK 2		Biopsychology & its Methods	Ch.1 & 5.1	
	Sep 10 S	Online quiz due: Biopsychology & its Methods		
	Sep 11 M	Lecture: Topic #1 - How can you know which biopsychological claims are true?		
	Sep 13 W	Lab: In-class quiz - Biopsychology & its Methods		
WK3		Behavioral Genetics	Ch.2.3 & 2.5	
	Sep 17 S	Online quiz due: Behavioral Genetics		
	Sep 18 M	Lecture: Topic #2 - How much of your personality is due to genetics		
	Sep 20 W	Lab: In-class quiz - Behavioral Genetics		
WK 4		Electrophysiology	Ch.3.2 & 4.1-4.4	
	Sep 24 S	Online quiz due: Electrophysiology		
	Sep 25 M	Lecture: Topic #3 - How does your mind arise from the electrical activit brain cells?		
	Sep 27 W	Lab: In-class quiz - Electrophysiology		
WK 5		Review for Midterm #1		
	Oct 2 M	Lecture: Review for Midterm #1		
	Oct 4 W	Lab: Review for Midterm #1		
WK 6		Midterm #1		
	Oct 9 M	College closed - No classes		
	Oct 11 W	Lab: Midterm Exam #1		
WK 7		Neurochemistry & Neuropharmacology	Ch.4.5-4.7, 15.3, & 18.1- 18.2	
Oct 15 S Online quiz due: Neurochemistry & Neurop		Online quiz due: Neurochemistry & Neurophari	macology	
	Oct 16 M	Lecture: Topic #4 - How do chemicals/drugs alter your state of mind? Lab: In-class quiz - Neurochemistry & Neuropharmacology		
	Oct 18 W			
WK 8		PNS & Brainstem	Ch.3.1, 3.3, 3.5, 3.6, & 14.5	

	Oct 22 S	Online quiz due: PNS & Brainstem		
	Oct 23 M	Lecture: Topic #5 - What are the functions of your peripheral nervous		
	Oct 20 W	system & brainstem structures?		
	Oct 25 W	Lab: In-class quiz - PNS & Brainstem		
WK 9		Forebrain Ch.3.6, 7.1, 7.3, 8.2, 8.4, 9.2, 15.4, & 17.1-17.4		
	Oct 29 S	Online quiz due: Forebrain		
	Oct 30 M	Lecture: Topic #6 - What are the functions of your forebrain structures?		
	Nov 1 W	Lab: In-class quiz - Forebrain		
WK 10		Review for Midterm #2		
	Nov 6 M	Lecture: Review for Midterm #2		
	Nov 8 W	Lab: Review for Midterm #2		
WK 11		Midterm #2		
	Nov 13 M	College closed – No classes		
	Nov 15 W	Lab: Midterm Exam #2		
WK 12		Lateralization & Perception Ch.6.4, 6.6, 7.3, 7.5, 11.7, 16 & 17.4		
	Nov 19 S	Online quiz due: Lateralization & Perception		
	Nov 20 M	Lecture: Topics #7&8 - How do the two sides of your brain differ & how do conscious experiences arise from your brain?		
	Nov 22 W	Lab: In-class quiz – Lateralization & Perception		
WK 13		Action Ch.8.2-8.5, 8.8, & 18.4		
	Nov 26 S	Online quiz due: Action		
	Nov 27 M	Lecture: Topic #9 - How do your voluntary actions arise from your brain?		
	Nov 29 W	Lab: In-class quiz - Action		
WK 14		Memory Ch. 11		
	Dec 3 S	Online quiz due: Memory		
	Dec 4 M	Lecture: Topic #10 - How does your brain allow you to relive previous conscious experiences?		
	Dec 6 W	Lab: In-class quiz - Memory		
	TBA	Exam: Final Exam		

5. Basis of Student Assessment (Weighting)

(This section should be directly linked to the Intended Learning Outcomes.)

Course component
Participation: 2%
Online Quizzes: 5%
In-class Quizzes: 33%
Midterm Exam #1: 18%

Midterm Exam #2: 18% Final Exam: 24%

6. Grading System

(No changes are to be made to this section unless the Approved Course Description has been forwarded through the Education Council of Camosun College for approval.)

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	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.
IP	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 will be assigned for the same course. (For these courses a final grade will be assigned to 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 instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

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.