

### CAMOSUN COLLEGE School of Arts & Science Department of Psychology

### PSYC-215-001 Biological Psychology Winter 2018

### **COURSE OUTLINE**

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

 $\Omega$  Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

#### 1. Instructor Information

(a)	(a) Instructor		Michael Pollock			
(b)	(b) Office hours		Mon 11:30-12:20, Tues 9:30-11:50, Thurs 10:30-11:50			
(c)	c) Location		Fisher 308B			
(d)	Phone	250-3	370-3111	(d) Phone	250-370-3111	
(e)	E-mail		pollockm@camosun.ca			
<b>(f)</b>	Website	•	http://online.camosun.ca			

### 2. Intended Learning Outcomes

Upon completion of this course a 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.
- 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.
- 9. 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

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

# 4. Course Content and Schedule

	COURSE SCHEDULE				
Week	Date	Lecture	Assigned readings		
WK 1		Introduction & Course Overview			
	Jan 8 M	Lecture: Introduction and course overview			
	Jan 10 W	Lab: Online quiz demonstration			
WK 2		Biopsychology & its Methods	Ch.1 & 5.1		
	Jan 14 S	Online quizzes due: -Knowledge of Biopsychology & its Methods			
	Jan 15 M	Lecture topics: -Overview of Biopsychology & its Methods			
	Jan 17 W	Lab in-class quizzes: -Knowledge of Biopsychology & its Methods			
WK 3		Behavioral Genetics	Ch.2.3 & 2.5		
	Jan 21 S	Online quizzes due: -Understanding of Biopsychology & its Meth -Knowledge of Behavioral Genetics	nods		
	Jan 22 M	Lecture topics: -Review of Biopsychology & its Methods -Overview of Behavioral Genetics			
	Jan 24 W	Lab in-class quizzes: -Understanding of Biopsychology & its Methods -Knowledge of Behavioral Genetics			
WK 4		Electrophysiology	Ch.3.2 & 4.1-4.4		
	Jan 28 S	Online quizzes due: -Understanding of Behavioral Genetics -Knowledge of Electrophysiology			
	Jan 29 M	Lecture topics: -Review of Behavioral Genetics -Overview of Electrophysiology			

	Jan 31 W	Lab in-class quizzes: -Understanding of Behavioral Genetics -Knowledge of Electrophysiology		
WK 5		Neurochemistry & Neuropharmacology Ch.4.5-4.7, 15.3, & 18.1-18.2		
	Feb 4 S	Online quizzes due: -Understanding of Electrophysiology -Knowledge of Neurochemistry & Neuropharmacology		
	Feb 5 M	Lecture topics: -Review of Electrophysiology -Overview of Neurochemistry & Neuropharmacology		
	Feb 7 W	Lab in-class quizzes: -Understanding of Electrophysiology -Knowledge of Neurochemistry & Neuropharmacology		
WK 6		Reading Break		
	Feb 12 M	Family Day - College closed		
	Feb 14 W	Reading Break - College closed		
WK 7		Midterm		
	Feb 18 S	Online quizzes due: -Understanding of Neurochemistry & Neuropharmacology		
	Feb 19 M	Lecture topics: -Review of Neurochemistry & Neuropharmacology -Review for Midterm Exam		
	Feb 21 W	Lab: Midterm Exam		
WK 8		PNS & Brainstem Ch.3.1, 3.3, 3.5, 3.6, & 14.5		
	Feb 25 S	Online quizzes due: -Knowledge of PNS & Brainstem		
	Feb 26 M	Lecture topics: -Overview of PNS & Brainstem		

	Feb 28 W	Lab in-class quizzes: -Knowledge of PNS & Brainstem	
WK 9		Forebrain	Ch.3.6, 7.1, 7.3, 8.2, 8.4, 9.2, 15.4, & 17.1- 17.4
	Mar 4 S	Online quizzes due: -Understanding of PNS & Brainstem -Knowledge of Forebrain	
	Mar 5 M	Lecture topics: -Overview of PNS & Brainstem -Review of Forebrain	
	Mar 7 W	Lab in-class quizzes: -Understanding of PNS & Brainstem -Knowledge of Forebrain	
WK 10		Lateralization	Ch.16 & 17.4
	Mar 11 S	Online quizzes due: -Understanding of Forebrain -Knowledge of Lateralization	
	Mar 12 M	Lecture topics: -Review of Forebrain -Overview of Lateralization	
	Mar 14 W	Lab in-class quizzes: -Understanding of Forebrain -Knowledge of Lateralization	
WK 11		Perception	Ch.6.4, 6.6, 7.3, 7.5, & 11.7
	Mar 18 S	Online quizzes due: -Understanding of Lateralization -Knowledge of Perception	
	Mar 19 M	Lecture topics: -Review of Lateralization -Overview of Perception	
	Mar 21 W	Lab in-class quizzes: -Understanding of Lateralization -Knowledge of Perception	
WK 12		Action	Ch.8.2-8.5, 8.8, & 18.4
	Mar 25 S	Online quizzes due: -Understanding of Perception -Knowledge of Action	

	Mar 26 M Mar 28 W	Lecture topics: -Review of Perception -Overview of Action  Lab in-class quizzes:
		-Understanding of Perception -Knowledge of Action
WK 13		Memory Ch. 11
	Apr 1 S	Online quizzes due: -Understanding of Action -Knowledge of Memory
	Apr 2 M	Easter Monday – College closed
	Apr 4 W	Lab in-class quizzes: -Understanding of Action -Knowledge of Memory
WK 14		Final Review
	Apr 8 S	Online quizzes due: -Understanding of Memory
	Apr 9 M	Lecture topics: -Review of Memory -Review for Final Exam
	Apr 11 W	Lab in-class quizzes: -Understanding of Memory
	TBA	Exam: Final Exam

# 5. Basis of Student Assessment (Weighting) Course component Weight

Participation: 1% 5% Online Quizzes: In-class Quizzes: 34% Midterm Exam: 24% Final Exam: 36%

# 6. Grading System

X	Standard Grading System (GPA)
	Competency Based Grading System

# 7. Recommended Materials to Assist Students to Succeed Throughout the Course

N/A

### 8. College Supports, Services and Policies



### Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <a href="http://camosun.ca/about/mental-health/emergency.html">http://camosun.ca/about/mental-health/emergency.html</a> or <a href="http://camosun.ca/services/sexual-violence/get-support.html#urgent">http://camosun.ca/services/sexual-violence/get-support.html#urgent</a>

### **College Services**

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <a href="http://camosun.ca/">http://camosun.ca/</a>

### **College Policies**

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <a href="http://camosun.ca/about/policies/">http://camosun.ca/about/policies/</a>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

### A. GRADING SYSTEMS http://camosun.ca/about/policies/index.html

The following two grading systems are used at Camosun College:

### 1. 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		1
0-49	F	Minimum level has not been achieved.	0

### 2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description		
СОМ	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.		
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.		
NC The student has not met the goals, criteria or competencies establish course, practicum or field placement.			

# **B.** 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 at <a href="http://camosun.ca/about/policies/index.html">http://camosun.ca/about/policies/index.html</a> 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 are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.		
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.		