



CAMOSUN COLLEGE
School of Arts & Science
Department of Psychology

PSYC-110-002
Experimental Psychology
Winter 2019

COURSE OUTLINE

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

Ω 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) Instructor	Michael Pollock		
(b) Office hours	Mondays 11:30-12:50 and Thursdays 10:30-11:50		
(c) Location	Fisher 308B		
(d) Phone	250-370-3111	Alternative:	
(e) E-mail	pollockm@camosun.ca		
(f) Website	http://online.camosun.ca		

2. Intended Learning Outcomes

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

1. Describe the components and rationale for the experimental methodologies used to acquire psychological knowledge.
2. Describe the difficulties inherent in psychological research and conduct thoughtful critiques of select studies.
3. Design and conduct studies of psychological topics and present the outcomes in a clear, logical fashion.
4. Apply psychological concepts to the study of neuroscience, sensation, perception, learning, memory, intelligence, and language.

The outcomes will be measured by a combination of examinations, assignments, presentations, group work, and discussions.

3. Required Materials

Myers, D.G. & DeWall, C.N. (2015). Psychology. (11th ed.). Worth Publishers.

4. Course Content and Schedule

Course Content:

This introductory course will familiarize students with the historical roots of experimental psychology and review some of its current topics, which will include: psychological research methods, evolutionary psychology, behavior genetics, neuroscience, states of consciousness, sensation, perception, learning, memory, thinking, and language. In addition to studying the concepts associated with these topics, students will be assisted with engaging in their own independent research as part of their course assignments. The survey of psychological concepts covered in this course will provide you with the

background in psychology required for taking more specialized courses in psychology while the first-hand experience you will gain in conducting research will allow you to be better able to critically evaluate research claims for their practical usefulness in your personal and professional life.

Deadlines:

The Course Schedule below lists the dates for when the different components of your course grade are due. Assignments have both target deadlines (i.e., deadlines for when assignments are expected to be submitted by) and hard deadlines (i.e., deadlines for when assignments will no longer be accepted for marks), with hard deadlines following 3 weeks after target deadlines or until the end of classes (whichever comes first). Quizzes/exams have just hard deadlines, which means there will be no make-up quizzes/exams for this course. Failing to take a quiz/exam by its scheduled date will result in a score of zero for that quiz/exam. Exceptions may be granted at the discretion of the instructor for cases of hardship or extenuating circumstances (e.g., a medical emergency) if the proper documentation to show this can be provided. In the case of a missed exam due to such documented extenuating circumstances, a make-up exam will be provided. In the case of all other missed/non-approved course items, the marks from that item will automatically be waived from your course grade and its weight distributed proportionately to the remaining accomplished course items.

Course Schedule:

Week	Lab or Lecture	Date	Lecture Topic	Readings*, Assignment, or Quiz/Exam due
Week 1				
	Lecture	Jan 7 Monday	Course Overview	
	Lab	Jan 8 Tuesday		
Week 2		Jan 13 Sunday		Read Prologue Online quiz on History of Psychology
	Lecture	Jan 14 Monday	History of Psychology	
	Lab	Jan 15 Tuesday		<i>Research Topic</i> Bonus quiz on History of Psychology
Week 3		Jan 20 Sunday		Read Ch. 1 Online quiz on Research Methods
	Lecture	Jan 21 Monday	Research Methods	
	Lab	Jan 22 Tuesday		<i>Primary Research Article</i> Bonus quiz on Research Methods
Week 4		Jan 27 Sunday		Read Ch. 4 Online quiz on Genetics & Evolution
	Lecture	Jan 28 Monday	Genetics & Evolution	

	Lab	Jan 29 Tuesday		<i>Article Summary</i> Bonus quiz on Genetics & Evolution
Week 5		Feb 3 Sunday		Read Ch. 2-1 to 2-5 Online quiz on Neuron & Nervous System
	Lecture	Feb 4 Monday	Neuron & Nervous System	
	Lab	Feb 5 Tuesday		<i>Hypothesis</i> Bonus quiz on Neuron & Nervous System
Week 6		Feb 10		Read Ch. 2-7 to 2-13 Online quiz on Brain
	Lecture	Feb 11 Monday	Brain	
	Lab	Feb 12 Tuesday		<i>Baseline Methods</i> Bonus quiz on Brain
Week 7		Feb 17 Sunday		
	Lecture	Feb 18 Monday	<i>Family Day</i> <i>College closed</i>	
	Lab	Feb 19 Tuesday	<i>Reading Break</i>	
Week 8		Feb 24 Sunday		
	Lecture	Feb 25 Monday	Review for Midterm	
	Lab	Feb 26 Tuesday		<i>Correlational Analyses</i> Midterm Exam
Week 9		Mar 3 Sunday		Read Ch. 3 Online quiz on States of Consciousness
	Lecture	Mar 4 Monday	States of Consciousness	
	Lab	Mar 5 Tuesday		<i>Experimental Methods</i> Bonus quiz on States of Consciousness
Week 10		Mar 10 Sunday		Read Ch. 6 Online quiz on Sensation & Perception

	Lecture	Mar 11 Monday	Sensation & Perception	
	Lab	Mar 12 Tuesday		Bonus quiz on Sensation & Perception
Week 11		Mar 17 Sunday		Read Ch. 7 Online quiz on Learning
	Lecture	Mar 18 Monday	Learning	
	Lab	Mar 19 Tuesday		<i>Descriptive & Inferential Statistics</i> Bonus quiz on Learning
Week 12		Mar 24 Sunday		Read Ch. 8 Online quiz on Memory
	Lecture	Mar 25 Monday	Memory	
	Lab	Mar 26 Tuesday		<i>Tables & Figures</i> Bonus quiz on Memory
Week 13		Mar 31 Sunday		Read Ch. 9 Online quiz on Thinking & Language
	Lecture	Apr 1 Monday	Thinking & Language	
	Lab	Apr 2 Tuesday		<i>Conclusions</i> Bonus quiz on Thinking & Language
Week 14		Apr 7 Sunday		
	Lecture	Apr 8 Monday	Review for Final	
	Lab	Apr 9 Tuesday		<i>Research Paper</i> Bonus quiz on Final
		TBA		Final Exam

5. Basis of Student Assessment (Weighting)

Your course grade will be based on a weighted average of the percentage points you achieve across the following course components:

Course Component	Weight
Online Quizzes (each online quiz is worth 0.1%)	1%
Midterm Exam	33%
Final Exam	33%
Assignments (each assignment is worth 3%)	33%
Participation & Bonus Questions (each bonus question is worth 0.05% extra)	Maximum 14% extra credit

Each of these components is described in more detail in the sections below. You can check the course D2L website at any time during the semester for your current class standing and you are invited to discuss any concerns about your grade with the instructor.

Quizzes & Exams:

All quizzes and exams will cover solely the material contained in the concept lecture notes, with each of the questions describing one of the points from the concept lecture notes and asking for the name of that concept. The format of the questions will be either short-answer or very multiple-choice (with questions listing as options the names of all the concepts from the relevant lectures). Half of the questions will be knowledge-type questions which use for descriptions of the concepts the same wording as the points in the concept lectures notes, while the other half of questions will be understanding-type questions which reword these points usually in the form of a real-life scenario.

Online Quizzes – Since your learning will be enhanced by testing yourself and practicing your retrieval of the course information from memory (known as the testing effect), for each set of concept lecture notes you will be assigned an online quiz. In addition to being worth marks, the online quizzes will also help prepare you for exams since they cover the same content from the concept lecture notes (although the understanding-type questions will use different scenarios). The online quizzes can be accessed through the course D2L website and can be performed on a computer either on or off campus. Students may take each online quiz an unlimited number of times until its deadline and only the highest score you achieve on a quiz before its deadline will be recorded as your mark for that quiz.

Exams – Exams will be in-class, closed book, and will not be cumulative (i.e., the final exam will only cover material that came after the midterm exam). You will only be given a single attempt at each exam. The content of the questions will be taken equally from each of the concept lecture notes covered by that exam.

Assignments:

Working in groups of up to 4 students, you will develop in the following 11 stages a psychological research project involving self-experimentation. Guidance will be provided in lecture throughout the semester for how to carry out these assignments. After you have completed an assignment, you should submit it into its proper D2L Dropbox. Feedback on the assignment will be provided by the instructor via the same D2L Dropbox. If you have any questions about the feedback, you should meet in person with the instructor during office hours to discuss these questions. Students may resubmit each assignment an unlimited number of times without late penalties until its hard deadline. To receive a mark for each assignment, your work must meet a satisfactory level of quality as determined by the instructor. You will not be allowed to progress to the next assignment until all requested revisions on the previously submitted assignment have been made and approved by the instructor.

Assignment #1 - Research Topic – You will identify a psychological aspect that the members of your group have each agreed to investigate in themselves, and provide a description of why you are personally interested in that topic. Example topics include the following:

- attention
- sleep

- dreams
- circadian rhythms
- drug use
- addiction
- sensation
- perception
- motor skills
- learning
- memory
- concept formation
- problem solving
- judgement formation
- cognitive skills
- executive functioning
- language
- intelligence
- creativity
- hunger
- body-weight regulation
- sex drive
- affiliation need
- achievement motivation
- happiness
- emotions
- stress
- health
- coping
- social cognition
- conformity
- obedience
- prejudice
- aggression
- attraction
- altruism

IMPORTANT NOTE: make sure it's a topic that you expect will naturally show variations within yourself from day-to-day and that you'd also be willing to share with the rest of the class the results you have taken on yourself about it.

Assignment #2 - Primary Research Article – You will perform a literature search using the Camosun Library database PsycINFO (for more information on how to use this database go to <http://camosun.ca.libguides.com/psycinfo>) to see what aspects about your approved research topic have already been examined by psychological research and find at least one primary research article about that topic, with each member of your group contributing a different article.

Assignment #3 - Article Summary - You will reference (in APA format) your approved primary research article, identify from its Results and Methods sections a finding that article has revealed about your topic and the methods they used to assess it, and then summarize in your own words this finding.

Assignment #4 - Hypothesis - Based on the finding from your approved Article Summary, you will generate a hypothesis that makes a specific prediction involving two variables (an independent and a dependent variable) and an expected direction of results.

Assignment #5 - Baseline Methods – Based on your group's approved hypotheses, you will describe in detail a method your group proposes for how each member of your group will similarly quantitatively measure in themselves natural variations in the variables listed in those hypotheses in order to non-experimentally test the hypotheses. The methods your group chooses for measuring your variables can be based on those previously used in the scientific literature or can be entirely of your own creation.

Assignment #6 - Correlational Analyses - Following approval of your proposed baseline methods by the instructor, you will start carrying out those methods. IMPORTANT NOTE: findings from a project whose methods have not been approved will receive a mark of zero – do not start data collection until your methods have first been approved. Data on each of your variables must be measured at least once a day (on the same days) for a minimum of 12 days. Based on the data you have individually collected in your baseline measurements, you will perform correlational analyses to test your group's approved hypotheses. In order to receive a mark for this assignment, on each day of your baseline measurements you must submit to D2L that day's data and your updated correlational analyses.

Assignment #7 - Experimental Methods – Based on the hypothesis that your group's approved correlational analyses most strongly support and that predicts a desired outcome, you will describe in detail a method your group proposes for how each member of your group will similarly experimentally test on themselves the relationship between the independent variable and the dependent variable listed in that hypothesis. The methods your group chooses for manipulating your independent variable and measuring your dependent variable can be based on those previously used in the scientific literature or can be entirely of your own creation. In your experimental methods, you will also describe a method your group proposes for how each member of your group will reduce the possibility of order effects, placebo effects (when blind manipulation options are available), and expectancy effects in measurements.

Assignment #8 - Descriptive & Inferential Statistics – Following approval of your proposed Experimental Methods by the instructor, you will start carrying out those methods. IMPORTANT NOTE: findings from a project whose methods have not been approved will receive a mark of zero – do not start data collection until your methods have first been approved. Data on your dependent variable must be measured at least once a day for a minimum of 6 days per condition, with at least 2 conditions (i.e., a minimum of 12 days in total). Based on the measurements you have individually collected in your experiment, you will calculate descriptive statistics (means and standard deviations) for each of your experimental and control conditions, and perform inferential statistics (t-tests) to determine if there were statistically significant differences between your conditions as predicted by the hypothesis for your experiment. In order to receive a mark for this assignment, on each day of your experimental study you must submit to D2L that day's data and your updated descriptive and inferential statistics.

Assignment #9 – Tables & Figures – To present your data in a clear format, you will create a table displaying the descriptive statistics from the data you individually collected in your experimental study. Also, to visually represent the major findings you have individually collected, you will create two types of summary figures: (1) scatterplots of the correlations between variables from your baseline measurements and (2) a bar graph comparing the average values of the different conditions in your experiment. You will provide meaningful labels of the axes in the figures: with the name of the independent variable as the title of the X-axis (i.e., horizontal axis) and the name of your dependent variable as the title of the Y-axis (i.e., vertical axis), along with descriptions of their units/conditions.

Assignment #10 - Conclusions – Based on the statistical analyses of your individual data, you will state which of your approved hypotheses were confirmed (if any), the direction of any relationships, and based on the results from your individual experimental study state whether any causal conclusions can be made. Your assignment mark is not dependent on whether your hypotheses were confirmed or not, but rather whether you have correctly interpreted this based solely on the data you collected and not based on what the scientific literature or others might have expected.

Assignment #11 – Research Paper – You will collaborate with your group to co-author in proper APA-style format a report of your group's research project based on each of the members' previously approved assignments. It will include in it each of the following sections: Title Page, Abstract, Introduction, Methods, Results, Discussion, References, Tables, and Figures.

Participation & Bonus Questions:

You will be offered extra credit for participating in the testing of experimental teaching methods applied to this course for the following three reasons:

1. to enhance your learning of course material by active engagement in class activities
2. to increase your knowledge of psychological research by being a study participant
3. to improve the teaching of this course by providing feedback on its effectiveness

Examples of the teaching methods that may be used, and that have been recommended in the academic literature on teaching and learning, include the following:

- case studies
- classroom discussion
- competitive learning
- concept mapping
- cooperative learning
- elaborative interrogation
- game-based learning
- generation effect
- imagery use for learning
- individualistic learning
- keyword mnemonic
- meta-cognition strategies
- peer tutoring
- practice testing
- problem-based learning
- rereading
- self-explanation
- simulations

The effectiveness of the teaching methods will be assessed by the following three types of measures:

1. behavioral measures of attention (video recordings of class behavior)
2. subjective evaluations (survey ratings of enjoyment, perceived knowledge/understanding, and motivation)
3. objective measures of knowledge/understanding (class performance on review questions)

With regards to the latter type of measures, in most lectures and labs you will be provided the opportunity to answer review questions about that week's course material. In lecture the review questions will consist of approximately 6 bonus questions (each worth 0.05% extra on your final course grade) given to all students (in randomly assigned groups) throughout the lecture and 1 bonus puzzle (worth 0.5% extra on your final course grade) given to the group of students that achieves the highest level of performance in these review activities. In lab the review questions will consist of a bonus quiz containing 20 bonus questions (each worth 0.05% extra on your final course grade) given at the end of the lab and with the format similar to exams. In order to be eligible to receive credit for correctly answering bonus questions in a given lecture/lab, at the beginning of that class you will need to sign an informed consent form granting permission for your responses in class to be collected anonymously for research purposes and you will need to fully participate in class activities for the entire duration of that lecture/lab.

6. Grading System

Standard Grading System (GPA)

Competency Based Grading System

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

Although not required for this course, the Myers & DeWall textbook website (known as LaunchPad) provides electronic access to the course textbook, study guides, and video resources. Students can access the specific version of it for this course via the following link:

<http://www.macmillanhighered.com/launchpad/myers11e/9829927>

To access this website you will also need to have an access code that either came with the purchase of your new textbook or that can be purchased from that website. If you have any problems

registering, purchasing, or logging in to that website, please contact their Customer Support by one of the following ways:

- through the online form
- by chat (via the online form, for student access and payment inquiries)
- by phone at 1 (800) 936-6899

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 @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

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 <http://camosun.ca/>

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 <http://camosun.ca/about/policies/>. 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	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		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
COM	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 established for this 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 <http://camosun.ca/about/policies/index.html> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> 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	<i>In progress:</i> 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	<i>Compulsory Withdrawal:</i> 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.