



CAMOSUN COLLEGE
School of Arts & Science
Department of Psychology

PSYC-110-D04
Experimental Psychology
Fall 2020

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, Wednesdays, Thursdays, and Fridays at 11:30-12:20
- (c) **Location** Visit me during office hours by clicking on the following link: [Virtual Office Hours](#)
- (d) **Phone** Use the link provided above to call me during office hours
- (e) **E-mail** If you need to contact me about an urgent personal matter, you can email me at pollockm@camosun.ca
- (f) **Website** All course activities will be held on D2L (<http://online.camosun.ca>). For course content related questions, you can post them any time during the semester on the D2L Discussion Board

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

Course Textbook

- Myers, D.G. & DeWall, C.N. (2018). *Psychology*. (12th ed.). Worth Publishers.

Methods of obtaining a copy of this textbook:

1. A digital copy of this textbook (called *Psychology Etext W/Launchpad 6Month Access*) is available from Camosun's Bookstore:
https://www.camosuncollegebookstore.ca/buy_access_codes.asp
2. Alternatively, electronic access to the textbook can be purchased from the textbook's website:
<https://www.macmillanhighered.com/launchpad/myers12e/13813333>
 Note: The textbook's website also has an option (called "I need to pay later") that lets you have free electronic access to the textbook for 21 days before asking you whether you still wish purchase access.
3. You can also borrow the textbook (possibly an older edition) from Camosun's Lansdowne library. Copies of it are available in the course reserve section for 2-hour loans.

Assigned Readings

All of the assigned readings for this course are from this course textbook. The Course Schedule below outlines the specific chapters and subsections of the textbook that you are to read each week. Concept notes, available in D2L Content, list the names of the concepts and their associated points from the assigned readings that you should focus on the most.

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 include the following: psychological research methods, behavior genetics, evolutionary psychology, neuroscience, states of consciousness, sensation, perception, learning, memory, thinking, and language. In addition to studying the concepts associated with these topics, students will have the opportunity to engage 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 specialized courses in psychology while the first-hand experience you will gain in conducting psychological 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 specific dates for when the different items of each course component are due. All course components have *hard* deadlines, which are deadlines for when items will no longer be accepted for marks afterwards. Failing to meet a hard deadline will result in a score of zero for that item. Exceptions may be granted at the discretion of the instructor for cases of hardship or extenuating circumstances (e.g., medical emergencies) in which the proper documentation is provided.

In addition to having a hard deadline, the research assignments also have *soft* deadlines, which are deadlines for when each of the research assignments are expected to be submitted by but will still be accepted for full marks afterwards (i.e., no late penalties) up until their hard deadline. This provides students with an opportunity to revise and resubmit for marks research assignments based on written feedback provided by the instructor.

COURSE SCHEDULE

Date	Readings	Lecture topic	Quiz #	Self-reflection assignment #	Research assignment
2020-09-14	Prologue	1.History of Psychology	#1	#1	
2020-09-15					1.Research Question & Rationale
2020-09-21	Ch. 1	2.Research Methods	#2	#2	

2020-09-22					2.Primary Research Articles & References
2020-09-28	Ch. 4	3.Genetics & Evolution	#3	#3	
2020-09-29					3.Article Summaries
2020-10-05	Ch. 2-1 to 2-5	4.Neuron & Nervous System	#4	#4	
2020-10-06					4.Hypotheses
2020-10-13					5.Correlational Study Methods
2020-10-19		Poster Presentations #1			
2020-10-26	Ch. 2-7 to 2-13	5.Brain	#5	#5	
2020-11-02	Ch. 3	6.States of Consciousness	#6	#6	
2020-11-03					6.Correlational Study Results; 7.Correlational Study Discussion
2020-11-09	Ch. 6	7.Sensation & Perception	#7	#7	
2020-11-10					8.Experimental Study Methods
2020-11-16	Ch. 7	8.Learning	#8	#8	
2020-11-23	Ch. 8	9.Memory	#9	#9	
2020-11-30	Ch. 9	10.Thinking & Language	#10	#10	
2020-12-01					9.Experimental Study Results; 10.Experimental Discussion
2020-12-07		Poster Presentations #2			
2020-12-08					Hard deadline for research assignments

5. Basis of Student Assessment (Weighting)

Evaluation

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

Course component	Weight of each item	Number of items	Total weight
Self-reflection assignments	5%	10	50%
Research assignments	3%	10	30%
Poster presentations	5%	2	10%
Quizzes	1%	10	10%

Each of the course 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.

The following cutoffs in percentage points, which are standard at Camosun, will be used in calculating final course letter grades:

Letter Grade	A+	A	A-	B+	B	B-	C+	C	D	F
Percentage	90 to 100	85 to 89	80 to 84	77 to 79	73 to 76	70 to 72	65 to 69	60 to 64	50 to 59	0 to 49

Final grades that end with a decimal point of 0.5 or above will be rounded to the next higher whole number, and grades that end with a decimal point below 0.5 will be rounded to the next lower whole number. The grades of the entire class may be scaled up or down at the discretion of the instructor or department. Grades are not official until they appear on a student's academic record. Extra assignments (beyond what is listed below) will NOT be offered to improve your final grade.

Self-Reflection Assignments

Psychological research has found across a number of different fields (e.g., development, memory, and expertise) that meaningful learning depends upon the degree to which you can relate new information to your previously learned experiences. According to this *Constructivist* view of learning, the greater the amount and quality of these connections you make, the more you can truly understand a concept. Therefore, in order to make the concepts in this course more meaningful to you, the self-reflection assignments will have you relate lecture concepts to your own personal interests and use your own unique personal experiences to develop insights into the workings of the mind. Instructions and forms for these assignment are available in D2L Content and all of your assignment work should be submitted through D2L Assignments. The marking of these assignments will be based upon the degree to which you can in your own words accurately and clearly relate these concepts to your personal interests/experiences. In order to deal with the vast amount of marking these assignments will entail for the instructor, with each self-reflection assignment the instructor will chose at random one question for in-depth marking and providing written comments on.

Research Assignments

In order for you to gain first-hand experience in conducting psychological research, you will develop and write up in stages throughout the semester a psychological research project involving a longitudinal study of yourself and your group members. Instructions, forms, templates, and examples for these assignments are available in D2L Content and all of your assignment work should be submitted through D2L Assignments. The instructor will provide written feedback on your work once a week after each week's research assignment deadline. Since each stage builds on the work of previous stages, you must correctly complete each stage in order to receive marks on subsequent stages, with opportunities given for revisions based on the written feedback provided (see the Deadline section below). Groups are encouraged to work on research assignments ahead of their scheduled deadlines but must wait for written instructor approval of proposed methods before data collection takes place.

Stage #1. *Research Question & Rationale* – You will identify a psychological question about yourself that you wish to have answered and that you are comfortable sharing with the rest of the class the results you will eventually collect on yourself about it. Based on your expressed interests, the instructor will assign you to a group to work with on this project. In your group, you will list the reasons why you and your group members are personally interested in this topic and agree upon on a single phrasing of the research question that is broad enough to apply to each of those reasons.

Stage #2. *Primary Research Articles & References* – You will perform a literature search to identify what possible answers to your research question previous psychological research has found and that later (in Stage #4 below) you will design hypotheses to test with your research group. You will then track down primary research articles that provide evidence for these claims, with each member of your group contributing different answers and primary research articles. Finally, you will reference these articles in APA format.

Stage #3. *Article Summaries* – For each of the primary research articles that you contributed to your group, you will summarize *in your own words* both what that article did (based on its Methods

section) and what it found (based on its Results section) that is of relevance to your research question. You will also provide supporting quotes, with citations, to back up your summaries of these articles.

Stage #4. Hypotheses – For each of the possible answers that you contributed to your group, you will generate a hypothesis that makes a testable prediction about the direction of the relationship between two variables (a predictor variable and an outcome variable) based on your article summaries.

Stage #5. Correlational Study Methods – For each of the hypotheses that you contributed to your group, you will describe in detail how your group could quantitatively measure natural variations in that variable over time (i.e., longitudinally) similarly within each of your group's members. You can base these methods on those previously used in the scientific literature (as outlined in your article summaries) or they can be entirely of your own creation.

Stage #6. Correlational Study Results - Following the instructor's approval of your group's proposed correlational methods, you will start taking measurements of yourself for testing each of your group members' hypotheses. (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 group has first received written approval of its proposed methods.) In order to verify the time course of your measurements, on each day of your correlational study you must submit to D2L Assignments updates of your raw data. Based on the data collected on yourself and separately on the data pooled across your group members, you will perform correlational analyses to see whether this data supports any of your group's hypotheses. You will then construct a table that reports the correlation coefficients from these analyses and produce scatterplots that visually display the relationships between the variables.

Stage #7. Correlational Study Discussion - Based on your group's correlational study results, you will state which of your group's hypotheses were confirmed and which one of them received the strongest support (i.e., had the highest correlation coefficient). (IMPORTANT NOTE: 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 your group collected.) You will relate the group's results to the possible answers you previously contributed to the group during the literature search. You will also compare your group's results to those of the studies you contributed article summaries about and for any discrepancies in findings speculate upon their possible reasons due to methodological differences.

Stage #8. Experimental Study Methods – For the hypothesis that received the strongest support from your group's correlational study, you will describe in detail how your group plans to further experimentally test similarly on each of themselves whether a causal relationship exists between the two variables (now called the independent variable and the dependent variable) in that hypothesis. The methods your group chooses for manipulating the independent variable and for measuring the dependent variable can be based on those previously used in the scientific literature (as outlined in your article summaries) or can be entirely of your own creation. You will also describe how your group proposes to reduce the possibility of confounding variables (i.e., order effects, placebo effects, and experimenter expectancy effects).

Stage #9. Experimental Study Results – Following the instructor's approval of your group's proposed experimental methods, you will start carrying out those methods on yourself. (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 group has first received written approval of its proposed methods.) In order to verify the time course of your measurements, on each day of your experimental study you must submit to D2L Assignments updates of your raw data. Based on the data collected on yourself and separately on the data pooled across your group members, you will perform inferential statistics (i.e., *t*-tests). You will then construct a table that reports the descriptive statistics from this study and produce a bar graph that visually displays the difference in effects between conditions.

Stage #10. Experimental Study Discussion – Based on your group's experimental study results, you will conclude whether a causal relationship exists between the two variables in your group's experimental hypothesis. (IMPORTANT NOTE: Your assignment mark is not dependent on whether your hypothesis was confirmed or not, but rather whether you have correctly interpreted this based solely on the data your group collected.) You will then relate these findings to your group's original rationale for conducting the study, and reflect on their implications and possible practical applications.

Poster Presentations

Poster presentations provide you with an opportunity to share with the rest of your student colleagues in the class updates on the project you are proposing (Poster Presentations #1) and later that you will have conducted (Poster Presentations #2) for your research assignments. In this way, others will also be able to benefit from the work and answers discovered by your research group, which is at the very heart of the scientific method's requirement to publish all methods and results in a transparent way. After the deadline for each poster presentation, the instructor will take the posters submitted to D2L Assignments and post them on D2L Contents for the entire class to see. Marks will be provided for clarity of explanation, accuracy, and completeness in your poster's summary of the stages of the research assignments that your group has accomplished up to that date.

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* or *retrieval practice effect*), for each set of lecture concepts you will be assigned a quiz. All quizzes will cover solely the material contained in the concept notes (see the Readings section above), with each of the questions describing one of the concept points and asking for the name of that concept. The format of the questions will be very multiple-choice, with questions listing alphabetically as options the names of all the concepts from the relevant lecture. 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 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. You can access each quiz through D2L Quizzes and take it an unlimited number of times up until its deadline (see the Deadlines section below), with only the highest score you achieve recorded as your mark for that quiz.

6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

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

Lecture Slides

Powerpoint slides are available for each lecture topic in D2L Content. These lecture slides supplement the content in the assigned readings and provide an additional source for helping you understand the course concepts.

Additional Textbook Resources

Although not required for this course, additional resources such as study guides and video resources can be accessed through the Myers & DeWall textbook website (known as LaunchPad) via the following link: <https://www.macmillanhighered.com/launchpad/myers12e/13813333>

If you experience any technical problems with that website, please contact their Customer Support by visiting: <https://macmillan.force.com/macmillanlearning>

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.