

DEPARTMENT OF PSYCHOLOGY Faculty of Arts

PSYC 365 Cognitive Psychology Winter 2022 Julia Kam **Lecture Location:** Jan10 – Jan28: online (via zoom) Instructor: Jan31 – Apr12: online or ENE 243 Phone: 403-220-5954 **Lecture Day/Time:** MWF 10:00 - 10:50am **Email:** julia.kam@ucalgary.ca* TA Name: **Daniel Cunningham** Office: Online (via zoom) TA Email: daniel.cunningham1@ucalgary.ca Office Hours: By Appointment

Course Description

Cognitive Psychology is the study of the mind and its operations. This course will provide a general introduction to the theoretical and empirical approaches to the study of human cognitive processes. Major topics covered will include: perception, attention, memory, concepts, language, problem-solving, and decision making. Together, we will use our own minds to understand processes involved in all aspects of our thinking.

Course Website

The course website is on D2L at https://d2l.ucalgary.ca. This website contains all lecture slides and videos, important links to other resources, discussion platform, and more. You will also hand in your assignments via D2L. Please check it often.

Course Format

This course will be delivered in-person. This means all classes will be held on campus. You can refer to the Tentative Schedule for specific dates of each class. Class materials for each lecture will be posted to the course D2L page by the day/time of each scheduled class as per the course schedule. For some lectures, you will be expected to have watched the corresponding lecture videos in order to participate in discussions in class.

Course Learning Outcomes

The Department of Psychology is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes they facilitate (see https://live-arts.ucalgary.ca/psychology/about#program-learning-outcomes), and the expected level of achievement.

Course Learning Outcomes	Assessment	PLO(s)	Level(s)
	Methods		

^{*}Email: please enter "Psyc 365" in the subject line.

Establish an understanding of the basic terminology, concepts, and theories of cognitive psychology.	Quizzes and Assignments	1, 4, 5	С
Identify, evaluate, and apply relevant theories or concepts of cognitive psychology to explain mental or behavioral phenomena or processes related to human cognition – from empirical findings, to everyday behavior, to issues of social and societal importance.	Quizzes and Assignments	1, 2, 4, 5, 7	С
Accurately interpret statistical results and figures, and summarize research findings.	Quizzes and Assignments	4, 5, 7	С
Describe research methods used in studying cognition, as well as their advantages and disadvantages. Identify the most optimal method for addressing any cognition-related research question.	Quizzes and Assignments	1, 2, 4, 5, 7	С
Critically evaluate and communicate research findings and ideas effectively, using clear and concise arguments.	Assignments	2, 4, 5	С

Notes. PLOs = Program-Learning Outcomes: 1 = demonstrate knowledge of psychological sciences, 2 = think critically and solve problems, 3 = conduct research and analyze data, 4 = communicate effectively, 5 = demonstrate information literacy, 6 = understand and implement ethical principles in a diverse world, 7 = apply psychological knowledge and skills, 8 = Demonstrate multicultural competence and awareness of issues related to equity, diversity,* and inclusion. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion. The Department of Psychology would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III.

Prerequisites

Psych 200 and 201 – Principles of Psychology I and II.

Required Text

Goldstein, E.B. (2019). *Cognitive psychology: Connecting mind, research, and everyday experience* (5th ed.). Boston, MA: Cengage.

Note: When purchasing this book from the university bookstore, please choose to purchase the textbook bundled with a *MindTap Access Code*. In this course, we will be completing a number of assignments that draw on the material from the class. If you choose to purchase MindTap, then you will be asked to complete assignments using their CogLab experiments, which will give you an appreciation for some of the classic experiments in Cognitive Psychology. If you go this route, please note that each Access Code will only work once - so if you choose to buy the textbook from another retailer, please ensure that you are getting the bundle with MindTap. Or, if you choose to purchase a previous edition

or used copy, and would like CogLab access, you would need to purchase a CogLab Access Code directly from the publisher (it costs about \$50 on its own, but does not include the rest of the MindTap content). The link is here: https://www.cengage.ca/c/coglab-5-44-1-term-6-months-instant-access-44-5th-edition-5e-francis-neath/9781285461083/.

If you would prefer not to purchase MindTap (or CogLab), you have the option to complete an alternative assignment on the topic (for each of the four assignments). See below for details.

Assessment Methods

Course component	Weighting	Due date
Quiz 1 Covers all lecture materials from Jan 10 to Jan 26	16%	January 28
Quiz 2 Covers all lecture materials from Jan 31 to Feb 16	16%	February 18
Quiz 3 Covers all lecture materials from Feb 28 to Mar 16	16%	March 18
Quiz 4 Covers all lecture materials from Mar 21 to Apr 8	16%	April 11
Individual CogLab Assignments (24% total)		
Assignment 1 – Sensory and Perception	6%	January 24
Assignment 2 – Attention	6%	February 9
Assignment 3 – Long Term Memory	6%	February 28
Assignment 4 – Decision Making	6%	March 30
Group Assignment Infographic	12%	April 8

Quizzes

There are four quizzes (each worth 16% of the final grade; Jan 28, Feb 18, Mar 18, Apr 11) will be based on lecture material, textbook and assignments. Quizzes will take up most of the class time, and no lectures will be given. All quizzes will consist of multiple-choice questions. Quizzes will be non-cumulative (i.e., material covered on Quiz 1 will not be explicitly covered in subsequent quizzes), but knowledge from earlier sections of the course may be necessary to answer certain questions on later exams. Refer to *Absence from an exam* section in case of absence from quizzes.

Quizzes in this course are open book. For this course, an open book quiz means that the use of class notes and the textbook is permitted. The use of online resources is prohibited. Students may not communicate with others about course material or the quiz either in person or electronically during exams. All exams are timed, and will be available on D2L starting at 10am MT on the day of the exam for

24 hours. Students can begin the quiz at a time that best suits their situation. Students have a 24 hour period to start a test or timed assessment. The test will be designed to be completed within class time, but students will also be provided with an additional 50% time to account for any technological issues (30min exam would be set up to allow 45 min to be completed once it is started within the 24 hour period). Technology requirements for exam completion include a computer and internet access.

Individual Assignments

CogLab Assignments: CogLab is an online learning platform. It can be purchased as a standalone product (if you purchase used/older versions of the textbook), or it comes included in MindTap (if you purchase the package of a brand new textbook). Coglabs allow students to experience important classic and current experiments in cognitive psychology. They help demonstrate some of the concepts via experiments that we will discuss in the course. There are two parts to each assignment. First, students will complete a specific experiment (or two) on CogLab for each assignment. The experiments are all fairly brief (10-25 minutes). Second, students will complete three to five short answer questions. The questions for the assignment typically include one or two factual questions about the material, a question that requires interpretation of your data relative to predictions, and one or two questions that require application of the concepts outside of the typical cognitive psychology lab or classroom and into everyday life. You will be graded primarily on the content of your responses (e.g. were the interpretations of your data correct), as well as your communication – including the correct use of relevant terminology.

<u>Alternative Assignments</u>: Students will be asked to read an original research article, and answer questions based on their reading. The topics of these articles will be the same as those for the CogLab assignments, and the length and depth of questions will be as similar as possible.

Each assignment is worth 6% of your final grade. All assignments must be submitted on D2L in the appropriate dropbox folder by 11:59pm (MT) on the due date indicated on the Tentative Schedule. Without instructor approval, late assignments will be penalized 10% per day (including weekend days), up to a maximum of 7 days late. After this time, the assignment will receive a grade of 0.

Group Infographic Assignment

Across the four "Experiment Days", the entire class will work together to design and execute an experiment that can be implemented in the classroom setting. On each of the four "Experiment Days" during lecture time, we will conceptualize a research question, craft an experimental design that addresses the question, "collect" data, and discuss the results. The goal of this assignment is to engage students in the research process, from beginning to end.

For this infographic, students will work in groups of two or three. The goal of this infographic is to convey the research questions, experimental design, results and what they mean, in a clear and effective manner. The ability to communicate scientific findings to the general public is important for scientists. Therefore, the purpose of this assignment is to encourage critical evaluation of our own research findings and clear presentation of such findings in the form of an infographic intended for the general public. Detailed information about the assignment and evaluation criteria will be available on D2L after week 2.

This group assignment is worth 12% of your final grade and are due 11:59pm MT on April 8th. One student from the group will submit the assignment via D2L in the appropriate dropbox folder. With instructor approval, late assignments will be penalized 10% per day including weekends, up to a maximum of 7 days late. After this time, the assignment will receive a grade of 0.

University of Calgary Academic Integrity Policy

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional code of conduct and promote academic integrity in upholding the University of Calgary's reputation of excellence. It is your responsibility to ensure that you have read and are familiar with the student academic misconduct policy: https://www.ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf.

Department of Psychology Criteria for Letter Grades

Psychology course instructors use the following criteria when assigning letter grades:

A+ grade: Exceptional Performance. An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

A, A- Range: Excellent Performance. Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance*. Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: Satisfactory Performance. Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards*. Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: *Course standards not met*. Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

Grading Scale

A+ 96-100% B+ 80-84% C+ 67-71% D+ 54-58%

Α	90-95%	В	76-79%	С	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

As stated in the University Calendar, it is at the instructor's discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades. To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A, but 89.4% will be rounded down to 89% = A-).

Tentative Lecture Schedule

Date	Topic/Activity/Due Date	Chapter Reading		
M Jan 10	Introductions University Lectures begin.			
W Jan 12	Lecture 1 (L1): Cognitive Psychology	Chapter 1		
F Jan 14	L2: Cognitive Neuroscience			
M Jan 17	L2: Cognitive Neuroscience	Chapter 2		
W Jan 19	L2: Cognitive Neuroscience			
R Jan 20	Last day to drop a class without financial penalty			
F Jan 21	L3: Sensation and Perception Last day to add or swap a course	- Chapter 3		
M Jan 24	L3: Sensation and Perception *Assignment 1 due			
W Jan 26	Experiment Day 1			
F Jan 28	Quiz 1 (L1-L3) Tuition fee deadline	Chapters 1-3		
M Jan 31	L4: Attention			
W Feb 2	L4: Attention	Chantar 4		
F Feb 4	L4: Attention	- Chapter 4		
M Feb 7	L4: Attention			
W Feb 9	L5: Sensory, Short-Term & Working Memory *Assignment 2 due	Chapter 5		
F Feb 11	L5: Sensory, Short-Term & Working Memory	·		

M Feb 14	L5: Sensory, Short-Term & Working Memory		
W Feb 16	Experiment Day 2		
F Feb 18	Quiz 2 (L4-L5)	Chapters 4-5	
Feb 21-26	Term Break. No Classes. February 21 st Alberta Family Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries).		
M Feb 28	L6: Long Term Memory *Assignment 3 due		
W Mar 2	L6: Long Term Memory	Chapters 6 & 7	
F Mar 4	L6: Long Term Memory		
M Mar 7	L7: Everyday Memory & Memory Errors		
W Mar 9	L7: Everyday Memory & Memory Errors	Chapter 8	
F Mar 11	L7: Everyday Memory & Memory Errors		
M Mar 14	L8: Conceptual Knowledge		
W Mar 16	Experiment Day 3		
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F Mar 18	Quiz 3 (L6-L8)	Chapters 6-8	
M Mar 21	L9: Core Executive Functions		
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M Mar 21	L9: Core Executive Functions		
M Mar 21 W Mar 23	L9: Core Executive Functions L9: Core Executive Functions		
M Mar 21 W Mar 23 F Mar 25	L9: Core Executive Functions L9: Core Executive Functions L10: Execution Function – Decision Making		
M Mar 21 W Mar 23 F Mar 25 M Mar 28	L9: Core Executive Functions L9: Core Executive Functions L10: Execution Function – Decision Making L10: Execution Function – Decision Making Experiment Day 4		
M Mar 21 W Mar 23 F Mar 25 M Mar 28 W Mar 30	L9: Core Executive Functions L9: Core Executive Functions L10: Execution Function – Decision Making L10: Execution Function – Decision Making Experiment Day 4 *Assignment 4 due	 Chapter 13	
M Mar 21 W Mar 23 F Mar 25 M Mar 28 W Mar 30 F Apr 1	L9: Core Executive Functions L9: Core Executive Functions L10: Execution Function – Decision Making L10: Execution Function – Decision Making Experiment Day 4 *Assignment 4 due L11: Executive Function – Problem Solving	 Chapter 13	
M Mar 21 W Mar 23 F Mar 25 M Mar 28 W Mar 30 F Apr 1 M Apr 4	L9: Core Executive Functions L9: Core Executive Functions L10: Execution Function – Decision Making L10: Execution Function – Decision Making Experiment Day 4 *Assignment 4 due L11: Executive Function – Problem Solving L12: Execution Function – Social Cognition	 Chapter 13	
M Mar 21 W Mar 23 F Mar 25 M Mar 28 W Mar 30 F Apr 1 M Apr 4 W Apr 6	L9: Core Executive Functions L9: Core Executive Functions L10: Execution Function – Decision Making L10: Execution Function – Decision Making Experiment Day 4 *Assignment 4 due L11: Executive Function – Problem Solving L12: Execution Function – Social Cognition L13: Execution Function – Emotion Regulation L13: Execution Function – Emotion Regulation	 Chapter 13	

Apr 19-29	Final Exam Period	

Course Credits for Research Participation (Max 2% of final grade)

Students in most psychology courses are eligible to participate in Departmentally approved research and earn credits toward their final grades. A maximum of two credits (2%) per course, including this course, may be applied to the student's final grade. Students earn 0.5% (0.5 credits) for each full 30 minutes of participation. The demand for timeslots may exceed the supply in a given term. Thus, students are not guaranteed that there will be enough studies available to them to meet their credit requirements. Students should seek studies early in the term and should frequently check for open timeslots. Students can create an account and participate in Departmentally approved research studies at http://ucalgary.sona-systems.com. The last day to participate in studies and to assign or reassign earned credits to courses is Tuesday, April 12, 2022.

Supporting Documentation

Students may be asked to provide supporting documentation for an exemption/special request. This may include, but is not limited to, a prolonged absence from a course where participation is required, a missed course assessment, a deferred examination, or an appeal. Students are encouraged to submit documentation that will support their situation. Supporting documentation may be dependent on the reason noted in their personal statement/explanation provided to explain their situation. This could be medical certificate/documentation, references, police reports, invitation letter, or a statutory declaration, etc. The decision to provide supporting documentation that best suits the situation is at the discretion of the student. Students cannot be required to provide specific supporting documentation, such as a medical note.

Students can make a Statutory Declaration as their supporting documentation (available at <u>ucalgary.ca/registrar</u>). This requires students to make a declaration in the presence of a Commissioner for Oaths. It demonstrates the importance of honest and accurate information provided and is a legally binding declaration. Several registered Commissioners for Oaths are available to students at no charge, on campus, please see <u>ucalgary.ca/registrar</u>.

Falsification of any supporting documentation will be taken very seriously and may result in disciplinary action through the Academic Discipline regulations or the Student Non-Academic Misconduct policy.

Absence From A Quiz/Exam

Makeup quizzes/exams are **NOT** an option without the approval of the instructor. Students who miss a quiz /exam have up to 48 hours to contact the instructor to ask for a makeup quiz/exam. It's the instructor's discretion if they will allow a make-up exam. Students who do not schedule a makeup quiz/exam with the instructor within this 48-hour period forfeit the right to a makeup quiz/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled quiz/exam. Once approved by the instructor a makeup quiz/exam must be written within 2 weeks of the missed test/exam on a day/time scheduled by the instructor. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam https://www.ucalgary.ca/registrar/exams/deferred-exams.

Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam https://www.ucalgary.ca/registrar/exams/deferred-exams. Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology (psyugrd@ucalgary.ca).

Reappraisal of Term Work or Final Grade

Reappraisal of Graded Term Work: http://www.ucalgary.ca/pubs/calendar/current/i-2.html Reappraisal of Final Grade: http://www.ucalgary.ca/pubs/calendar/current/i-3.html

Academic Accommodations

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure.

Academic Misconduct

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at http://www.ucalgary.ca/pubs/calendar/current/k.html

Instructor Intellectual Property

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material

protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Freedom OF Information and Protection of Privacy

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

Student Support and Resources

https://www.ucalgary.ca/registrar/registration/course-outlines

Important Dates

The last day to drop this course with no "W" notation and still receive a tuition fee refund is Thursday, Thursday, January 20, 2022. Last day add/swap a course is Friday, January 21, 2022. The last day to withdraw from this course is Tuesday, April 12, 2022.

https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html