

PSYC 451A: The Dynamics of Cognitive Control in Aging

Spring 2026

We acknowledge and respect the ləkʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt, and WSÁNEĆ peoples whose historical relationships with the land continue to this day

Course Information

Section: A01

CRN: 22809

Instructor: Dr. Tarek Amer (he/him)

Prerequisite: PSYC 300A and PSYC 351A or two of PSYC 351B/C/D

Course Overview

In this class, we will learn all about age-related changes in cognitive control, and how those changes impact performance on memory and other cognitive tasks.

Grading

Reading responses: 25%

Participation: 20%

Reading presentation: 10%

Media report: 15%

Media report presentation: 5%

Final paper: 25%

Extra credit: 2%

Reading responses: 25%

Each week, you will be assigned 2-3 readings, which you will need to comment on using Perusall. Readings will be added to Perusall a minimum of 1 week in advance. Readings responses will be due by **11am** on class days. Extensions may be granted on occasion if a legitimate reason is provided (please email if you require an extension). Please see Perusall Instructions document for further information.

** You do not need to submit a reading response for the class in which you are presenting and one other class of your choosing. If you choose to submit reading responses for all classes, your lowest 2 grades will be dropped.*

Participation: 20% (includes class discussion and activities)

To get the most out of this class, participation is key. Participation can take many forms including: showing up on time, being engaged, being respectful of others, asking for clarification, sharing insights, voicing, or demonstrating agreement or disagreement, raising questions of interest, responding to classmates' questions, etc. Your participation grade will reflect the *entire* semester, so it is important that you try to engage with the material and your classmates on a regular basis. That being said, participation will not be based on the *number* of times you speak and more based on the quality of your comments/questions.

Reading presentation: 10%

Using a form that I will send out on the first week of class, you will sign up to present one of the assigned readings in a short (~7-10 minute) PowerPoint (or other presentation software) presentation. The presentation should summarize the reading for an audience that may not

have read the paper. The presentation must include a summary of the background literature (that is necessary to understand the current study), the research question, methods, results, interpretation of results, and at least one limitation AND direction/question for future research to facilitate class discussion. For studies with many results, you may choose to highlight and present a few that you consider to be most significant.

Media report: 15%, due Feb 13

For your media report, you will submit a brief article (1000 words max) on a scientific paper published in 2020 or later on any of the topics covered so far. Your report should convey the essence of the finding and its importance and implications in language a lay person can understand. After that, it is up to you to make it as interesting as you can so that a person who is not a specialist will want to read it and discuss it with his or her friend, family, etc. The original article on which the media report is based also needs to be submitted.

Media report presentation: 5%, Feb 23, Feb 26

You will share your media report with the class in a data blitz format (5 minutes +1 min for questions). You will be assessed on your ability to describe and summarize the key features of your report for a naïve audience in a concise presentation format. This presentation should be less technical than the reading presentation and more tailored towards a lay audience. Just like a conference talk, the 5-minute time limit is strict and you will be cut off if you exceed it.

Final paper: 25%, due Apr 2

For your final paper, you will propose a research study based on a question related to the readings and themes of the course. Your proposal does not need to include a study plan or design but must include a primary research question and hypothesis(es). You can model your paper after an introduction section from an empirical research article. Your paper should be between 6-8 (maximum) pages.

Extra credit: 2%

You can earn up to 2% extra credit toward your final grade by participating in research studies conducted in the Department of Psychology. One hour of participation earns you 1 SONA credit. Credits are given in 0.5 increments, with 2 credits required for a 1% increase in your final grade. For details on participating in research studies, go to the Department of Psychology web site: <https://www.uvic.ca/socialsciences/psychology/research/participants/>. You must be sure to assign your credits to this course (and this section of the course) no later than the last day of class, otherwise you will not receive extra credit in this course.

** If you do not wish to participate in research studies for some reason, but still wish to have the opportunity to earn an equivalent amount of extra credit, you may contact us to arrange for an alternative option involving an assignment. If you wish to select this option, you must notify me by no later than Mar 16.*

Important information:

Students who have completed the following elements will be considered to have completed the course: *50% of reading responses, media report, final paper*

- Failure to complete one or more of these elements will result in a grade of "N" regardless of the cumulative percentage of all other elements of the course. N is a failing grade and factors into GPA as a value of 0.
- In accordance with the University's policy on academic concessions, "A student who completes all course requirements is not eligible for an academic concession".

Consequently, students can only request deferrals for the completion of required course components and not for non-essential course components.

- The University of Victoria is committed to creating a learning experience that is as accessible as possible. If you are registered with the Centre for Accessible Learning and anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me. If you are a student with a disability or chronic health condition, you can meet with a CAL advisor to discuss access and accommodations.

Course dates:

Jan 18: Last day for 100% reduction of tuition fees for standard second term courses

Feb 8: Last day for 50% reduction of tuition fees for standard courses

Feb 28: Last day for withdrawing from second term courses without penalty of failure

Course Policies

1. **Assignments:** All written assignments should be written in 12-point Times New Roman font and double spaced with standard 1-inch margins. Any portion of your writing which draws on an outside source must follow APA citation guidelines (7th edition). Assignments must be turned in on time (notwithstanding exceptional circumstances). 1% will be deducted for each day late up to 3 days, after which 5% will be deducted per day.
2. **Academic Integrity:** You are not permitted to use an external editor or generative artificial intelligence without explicit permission from the instructor, which may be granted in exceptional circumstances (e.g., translation tools). I reserve the right to use cheating detection software or other platforms to assess the integrity of student work. Suspected violations of UVic's academic integrity policy (<https://www.uvic.ca/students/academics/academic-integrity/index.php>) will be reported to and dealt with by the undergraduate chair.
3. **Etiquette:** In this class, you will be expected to follow the same standards for etiquette as are expected of any academic or professional (and definitely of a scientist/psychologist). **Respect:** As with any class or work environment, you will be expected to demonstrate respect for your instructor, your colleagues, and yourself. While debates and disagreements are to be expected, it is important that professionalism is maintained at all times. This means refraining from any personal attacks (e.g., "you wouldn't understand because you're _____") or phrasing/language that might belittle or hurt others (e.g., "how could you think that? That doesn't make any sense"), whether intentional or unintentional. Instead, please practice positive language (e.g., "that's a great point. Though I might add _____"). Keep in mind that others in the classroom may bring different and unique perspectives that may differ from your own but are no less valid. In fact, hearing diverse perspectives may even help you to better understand or engage with the research in question. Following these rules will help us to collectively cultivate a safe and warm atmosphere for discussion, which will support all our learning!

*Note: As with other STEM fields, Psychology has a history of excluding or marginalizing under-represented minorities (URMs). We can do our part to combat historical and current injustices not only through our work, but also through our practices. As you progress through this class, I encourage you to consider the role of privilege in *who* has the ability to conduct, and obtain access to, science, and to think about what you personally, and we as a field, can do to amplify the voices of URM.

Phones and laptops: Please keep your phones away and turned off or on silent. While you may use a laptop during class if that is your preference, I would strongly suggest putting it away. This is a small discussion-based class and laptops can be a big distraction. You will

get the most out of this class if you are actively engaged and participating in the class discussions.

4. **Presentations:** As this is a seminar style class, you will be graded on oral presentations. There will be no substitutions for presentations. If you are a nervous presenter, I am happy to work with you towards the goal of presenting in class. Keep in mind that the goal of these presentations is to *practice* oral presentation skills – I do not expect any of you to be experts, but I do expect you to try.
5. **In-class Participation:** As noted above, you are expected to maintain professionalism and respect in all class discussions and activities. A few other things to keep in mind: while discussions can be light and fun, and we will occasionally go off on tangents, please do try to keep your comments on topic. Similarly, while personal experience can often be relevant to the topic at hand, the goal of our in-class discussions and activities is to engage with the readings. Sometimes it can be interesting to relate the readings to a topic of personal interest or experience, to get the most out of this class, I expect you to go beyond the material you are most comfortable or familiar with.

Schedule

Week 1	Introduction
Jan 5	
Jan 8	
Week 2	Distraction Encoding
Jan 12	
Jan 15	
Week 3	Memory Specificity
Jan 19	
Jan 22	
Week 4	Retrieval Differences: Implicit vs. Explicit Retrieval
Jan 26	
Jan 29	
Week 5	Controlled Retrieval: Interference Resolution
Feb 2	
Feb 5	
Week 6	Memory Representations
Feb 9	
Feb 12	
Week 7	READING WEEK
Feb 16	NO CLASS
Feb 19	NO CLASS
Week 8	Media Report Presentations
Feb 23	
Feb 26	
Week 9	Prior Knowledge Part 1
Mar 2	
Mar 5	
Week 10	Prior Knowledge Part 2
Mar 9	NO CLASS
Mar 12	
Week 11	Decision Making
Mar 16	
Mar 19	
Week 12	Strategic Use of Control
Mar 23	
Mar 26	
Week 13	Reduced Control Benefit
Mar 30	
Apr 2	NO CLASS *Final paper due*

UNIVERSITY OF VICTORIA
Department of Psychology
Important Course Policy Information
Spring Session 2026

Accessible Learning

The University of Victoria is committed to creating a learning experience that is as accessible as possible. If you are registered with the [Centre for Accessible Learning](#) and anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me. If you are a student with a disability or chronic health condition, you can meet with a CAL advisor to discuss access and accommodations.

Attendance and Absences

Attendance is important. Students who do not attend their classes during the first two weeks (and do not inform the instructor of valid circumstances that prevent their attendance) may be dropped from both class registration and the waitlist.

Students are expected to attend all classes in which they are enrolled. Students may be assigned a final grade of N or debarred from writing final examinations if they fail to satisfy a minimum attendance requirement set by the instructor for lectures, laboratories, online course discussions or learning activities, tutorials, or other learning activities set out in the course outline.

Medical documentation for short-term absences is **not required** (approved by Senate). Students who cannot attend due to illness are asked to notify their instructors immediately. If illness, accident, or family affliction causes a student to miss the final exam or to fail to complete any required assignment/assessment by the end of the term students are required to submit a request for academic concession (see below).

Children and Pets

If you need to bring your children or pet to class, please do not hesitate to do so. It is understood that sometimes this is necessary due to care circumstances. However, please aim to have minimal class disturbance so that student learning is not impacted.

Class Recording and Auto-Captioning Statement

The instructor may record class sessions and those recordings may be made available to all students in the class via Brightspace. If you have questions or concerns regarding class recording and privacy, please contact privacyinfo@uvic.ca

Auto-generated captioning may be enabled in this course. Auto-captioning is highly error-prone, especially for specialized terminology and proper names. Students are asked to refer to the audio feed for clarification of any errors. If you find captioning errors that are offensive, please contact your instructor and/or teaching assistant so that they are aware. If you require captions as part of an academic accommodation, please contact [CAL](#).

Commitment to Inclusivity, Diversity, and Respectful Environments in the Classroom and Online

The University of Victoria is committed to providing a positive and supportive and safe learning and working environment for all its members. All members of the university community have the right to this experience and the responsibility to help *create* such an environment. The University will not tolerate racism, sexualized violence, or any form of discrimination, bullying, or harassment.

Please be advised that, by logging into UVic's learning systems or interacting with online resources and course-related communication platforms, you are engaging in a University activity.

All interactions within this environment are subject to the university expectations and policies. Any concerns about student conduct may be reviewed and responded to in accordance with the appropriate university policy.

To report concerns about online student conduct: onlineconduct@uvic.ca

Copyright

All course content and materials are made available by instructors for educational purposes and for the exclusive use of students registered in their class¹. The material is protected under copyright law, even if not marked with ©. Any further use or distribution of materials to others requires the written permission of the instructor, except under fair dealing or another exception in the Copyright Act. Violations may result in disciplinary action under the [Resolution of Non-Academic Misconduct Allegations policy \(AC1300\)](#) or the [Academic Integrity Policy](#), whichever is more appropriate for the situation.

Course Experience Survey (CES)

I value your feedback on this course. Toward the end of term, you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to the instructor regarding the course and their teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to <http://ces.uvic.ca>. You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. You will be reminded nearer the time, but please be thinking about this important activity, especially the following three questions, during the course.

1. What strengths did your instructor demonstrate that helped you learn in this course?
2. Please provide specific suggestions as to how the instructor could have helped you learn more effectively.
3. Please provide specific suggestions as to how this course could be improved.

Disclaimer

The schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.

Grading

In classes that are based on a percentage grading scheme, the following [Undergraduate Grading Scale](#) is used

Grade	A+	A	A-	B+	B	B-	C+	C	D	F
Percentage	90-100	85-89	80-84	77-79	73-76	70-72	65-69	60-64	51-59	< 50
GP Value	9	8	7	6	5	4	3	2	1	0

Rounding is only applied to the final grade and is rounded up at the 0.5% level (e.g., 84.49% is rounded to 84% and 84.50% is rounded to 85%).

Medical Documentation for absences

No medical documentation for short-term absences is required (Approved by Senate).

If you are seeking a Withdrawal Extenuating Circumstances or an Aegrotat grade, medical documentation may be required if relevant.

Ombudsperson and Academic Concerns

From the course calendar...

Depending on the nature of the academic matter of concern to the student, the order in which the student should normally try to resolve the matter is: first, the course instructor; second, the Chair of the department; third, the Dean of the faculty; and finally, the Senate.

If you are having an academic concern or problem that cannot be resolved with your instructor or the Department Associate Chair, you may wish to consult with the Office of the Ombudsperson (<https://uvicombudsperson.ca>). Current contact information for the office can be found here <https://uvicombudsperson.ca/contact/>.

¹ Syllabi belong to the department through which the course is administered.

Policy on Academic Integrity including Plagiarism and Cheating

The Department of Psychology fully endorses and intends to enforce rigorously the [Senate Policy on Academic Integrity](#). It is of utmost importance that students who do their work honestly be protected from those who do not. Because this policy is in place to ensure that students carry out and benefit from the learning activities assigned in each course, it is expected that students will cooperate in its implementation.

The offences defined by the policy can be summarized briefly as follows:

1. **Plagiarism.** You must make sure that the work you submit is your work and not someone else's. There are proper procedures for citing the works of others. The student is responsible for being aware of and using these procedures.
2. **Unauthorized Use of an Editor.** The use of an editor is prohibited unless the instructor grants explicit written authorization.
3. **Multiple Submission.** Only under exceptional circumstances may a work submitted to fulfill an academic requirement be used to satisfy another similar requirement. The student is responsible for clarifying this with the instructor(s) involved.
4. **Falsifying Materials Subject to Academic Evaluation.** This includes falsification of data, use of commercially prepared essays, using information from the Internet without proper citation, citing sources from which material is not actually obtained, etc.
5. **Cheating on Assignments, Tests, and Examinations.** You may not copy the work of others in or out of class; you may not give your work to others for the purpose of copying; you may not use unauthorized material or equipment during examinations or tests; and you may not impersonate or allow yourself to be impersonated by another at an examination. The Department of Psychology has a policy of not making old examinations available for study purposes. Therefore, use of old exams without the express written permission of the instructor constitutes cheating by the user, and abetting of cheating by the person who provided the exam.
6. **Aiding Others to Cheat.** It is a violation to help others or attempt to help others to engage in any of the conduct described above.

The use of a generative artificial intelligence (AI) is strictly prohibited in any submitted work (unless expressly endorsed by the instructor as part of an assignment).

Instructors are expected to make every effort to prevent cheating and plagiarism. This may include the assignment of seating for examinations, asking students to move during examinations, requests to see student identification cards, and other measures as appropriate. Instructors also have available to them a variety of tools and procedures to check for Internet and electronic media-based cheating. In instances of suspected or actual plagiarism or cheating, instructors, following prescribed procedures, are authorized to take steps consistent with the degree of the offence. These measures will range from a zero on the test or assignment or a failing grade for the course, probation within a program to temporary or even permanent suspension from the University.

Rights of Appeal are described in the Policy on Academic Integrity in the University calendar Spring 2025.

The definitive source for information on Academic Integrity is the University Calendar

Other useful resources on Plagiarism and Cheating include:

1. The Ombudsperson's office: <https://uvicombudsperson.ca/academic-integrity/>
The [Office of the Ombudsperson](#) is an independent and impartial resource to assist with the fair resolution of student issues. A confidential consultation can help you understand your rights and responsibilities. The Ombudsperson can also clarify information, help navigate procedures, assist with problem-solving, facilitate communication, provide feedback on an appeal, investigate and make recommendations. Phone: 250-721-8357; Email: ombuddy@uvic.ca; Web: uvicombudsperson.ca.
2. UVic Library Resources: <http://www.uvic.ca/library/research/citation/plagiarism/>
3. UVic Library Document on [Avoiding Plagiarism](#)

Prerequisites

Students who remain in courses for which they do not have the prerequisites do so at their own risk. Students who complete courses without prerequisites ARE NOT exempt from having to complete the prerequisite course(s) if such courses are required for the degree program.

Program Requirements

For more information see the [UVic Calendar](#).

Registration Status

Students are responsible for verifying their registration status. Registration status may be verified using My Page, View Schedule. Course adds and drops will not be processed after the deadlines set out in the current UVic Calendar.

Students who do not attend classes must not assume that they have been dropped from a course by an academic unit or an instructor. Courses that are not formally dropped will be given a failing grade, students may be required to withdraw and will be required to pay the tuition fee for the course.

Request for Academic Concessions

Students can apply for [academic concessions](#) if their course requirements are affected by (i) unexpected and/or unavoidable circumstances (e.g., illness, family affliction, etc.), or (ii) conflicting responsibilities (e.g., service in the armed forces or first responder, representing the university).

- **Request an in-course extension**

If you require more time to complete a course requirement or miss a test or midterm exam, then you will need to complete the [“In-Course Extension Form”](#) and submit it directly to your course instructor. All course requirements must be completed prior to the submission of final grades.

- **What to do if you miss the final exam scheduled during the formal exam period**

Apply at Records Services for a [“Request for Academic Concession”](#), normally within 10 working days of the date of the exam. Records Services will forward the form to the instructor. If the concession is granted, the instructor will determine how to deal with the situation (for example, a deferred exam). Where a concession is not applied for or where such application is denied, an N grade will be entered on the student's academic record.

- **What to do if you require additional time to complete course requirements beyond the normal term.**

Apply at Records Services for a [“Request for Academic Concession”](#), normally within 10 working days of the end of the course. Records Services will forward the form to the instructor. If the concession is granted, the instructor will determine how to deal with the situation. Where a concession is not applied for or where such application is denied, an N grade will be entered on the student's academic record if the missing work has been deemed required. Note, only required course components may be deferred.

Research Participation Opportunities with the Department of Psychology

The Department of Psychology offers multiple opportunities to participate in research studies over the year. Students are encouraged to learn more about the field of psychology by volunteering in these studies. Information about studies can often be found posted on notice boards around the Department as well as through our Participant Pool webpage at <https://www.uvic.ca/socialsciences/psychology/research/participants/>.

Student Code of Conduct

The [Student Code of Conduct](#) explains how University policies regarding student behaviour are interpreted and applied within the Faculties of Humanities, Science and Social Sciences.

Student Support Services

[Learn Anywhere](#) is the student support portal for a full range of student academic and support services. Services include: [Centre for Academic Communication](#), [Math & Stats Assistance Centre](#), [Counselling Services](#), [Health Services](#), [Library](#), [Ombudsperson](#), and [Computer Help Desk](#)

This classroom is a trans-inclusive space

Please indicate if you have a preferred name and pronoun that you'd like to be used in the classroom. Please e-mail your instructor or your TA if you would like to discuss the climate of this classroom for trans students. Gender neutral bathrooms are available at UVic.

University of Victoria Students' Society (UVSS)

The [UVSS](#) is a social justice based non-profit run by students, for students and is entirely separate from UVic. As an undergrad student, you are already a member! We work on issues affecting students such as affordability, public transit, sexualized violence, sustainability, student employment, and much more. We fund clubs and course unions, and have several advocacy groups. We also have a Food Bank and Free Store, a Peer Support Centre, and run your health and dental plan. We are here to support you, so please reach out to us at [uvss.ca!](http://uvss.ca)

Academic Important Dates

Spring session – second term (January – April)

Monday, January 5 th	Second term classes begin for all faculties
Sunday, January 18 th	Last day for 100% reduction of tuition fees for standard second term courses. 50% of tuition fees will be assessed for courses dropped after this date.
Wednesday, January 21 st	Last day for adding courses that begin in the second term
Saturday, January 31 st	Last day for paying second term fees without penalty
Sunday, February 8 th	Last day for 50% reduction of tuition fees for standard courses. 50% of tuition fees will be assessed for courses dropped after this date.
Monday, February 16 th	University Closed (Family Day)
February 16 th - 20 th	Reading Break for all faculties
Saturday, February 28 th	Last day for withdrawing from full year and second term courses without penalty of failure
Monday, March 9 th	First registration date for Summer Session 2026
Thursday, April 2 nd	Last day of classes for all faculties
Tuesday, April 7 th	Examinations begin for all faculties
Wednesday, April 22 nd	Examinations end for all faculties

Add and drop dates for standard 2025-2026 Winter Session courses

Term	Start Date	End Date	100% Fee Reduction	Add Deadline	50% Fee Reduction	Academic Drop no Fee Reduction
First term	Sep 3	Dec 3	Sep 16	Sep 19	Oct 7	Oct 31
Second term	Jan 5	Apr 2	Jan 18	Jan 21	Feb 8	Feb 28

Sexualized Violence Prevention and Response at UVic

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:

Where: Office of Equity and Human Rights, Sedgewick Building, Room C133

Phone: 250 721 8021

Email: eqhr01@uvic.ca

Web: <https://www.uvic.ca/sexualizedviolence/>

BE WELL



A note to remind you to take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone.

Social Life, Friends, & Community at UVic:

Having a social network is an extremely important foundation for positive mental health. There are lots of benefits to joining clubs, course unions, intramurals and teams on campus.

<https://www.uvic.ca/undergraduate/housing-student-life/student-life/index.php>

Counselling Services:

The Student Wellness Centre can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students. <https://www.uvic.ca/student-wellness/contacts/student-wellness-team/index.php#ipn-counsellors>

Health Services:

The Student Wellness Centre also provides a full service primary health clinic for students. <https://www.uvic.ca/student-wellness/contacts/student-wellness-team/index.php#ipn-physicians>

Centre for Accessible Learning:

The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations <https://www.uvic.ca/accessible-learning/index.php>. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

Elders' Voices:

The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students, staff, faculty and administration in Indigenous ways of knowing and being.

www.uvic.ca/services/indigenous/students/programming/elders/

Mental Health Supports and Services:

Mental health supports and services are available to students from all areas of the UVic community: <https://www.uvic.ca/student-wellness/wellness-resources/mental-health/>