Neuropsychology, Neuroimaging and Aging

PSYCHOLOGY 491 A02: Advanced Special Topics in Psychology Spring 2024 (CRN 22865)

Times
Tuesdays, Wednesdays, and Fridays 11:30am-12:20pm, Clearihue Building, A312

Instructor Jodie Gawryluk, Ph.D., R.Psych (she/her)
E-mail gawryluk@uvic.ca

I acknowledge and respect the Lək̓ʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Lək̓ʷəŋən and WSÁNEĆ Peoples whose historical relationships with the land continue to this day.

Appointments

I would be happy to meet with you to discuss information related to the course or your interest in psychology! Please email anytime (email: gawryluk@uvic.ca) and we can set up a time to meet.

About this Course

Neuropsychology examines the relationship between the brain and behaviour and neuroimaging provides a way to understand brain structure and function in vivo. In this course you will learn about theories of aging and ways to measure changes in brain structure and function during healthy aging and in age-related brain disorders. At the end of the course, you will have a better understanding of magnetic resonance imaging and neuropsychological conditions such as Alzheimer’s disease, multiple sclerosis, and stroke. I hope that through these topics you will develop your interest in neuropsychology and an appreciation for how neuroimaging methods can be used to study the aging brain. I find these topics fascinating, and I hope you will too!
Prerequisites

In order to benefit from this course, the Department of Psychology has established that the prerequisite for this course is PSYC 300A or an equivalent undergraduate human neuropsychology course.

Registration

Course Add Deadline: Students are responsible for checking their registration status before the end of the course-add period (January 24, 2024); students will not be added after this deadline. It is each student’s responsibility to check and ensure that they are registered appropriately. Last day for withdrawing from first-term courses without penalty of failure is February 29, 2024.

Readings for this class

The readings for this course will come from a variety of sources and I will make the readings and a full schedule of course topics available to you ahead of class time through BrightSpace (https://bright.uvic.ca/d2l/home/302215).

Course Objectives

In this course, I will provide opportunities for you to:
- Learn about and develop an interest in neuropsychology
- Gain an understanding of neuroimaging methods, with a focus on magnetic resonance imaging
- Learn how neuroimaging studies have contributed to theories of brain aging
- Demonstrate competency in discussing literature on age related neuropsychological conditions
- Participate in an atmosphere of learning, sharing and curiosity

Course Structure:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations (TBD)</td>
<td>50% (25% each)</td>
</tr>
<tr>
<td>Readings</td>
<td>10%</td>
</tr>
<tr>
<td>Participation</td>
<td>15%</td>
</tr>
<tr>
<td>Capstone project (March 26, 27, April 2,3, 5)</td>
<td>25%</td>
</tr>
</tbody>
</table>

At the beginning of our class together, I will take time to introduce you to key topics, including neuroanatomy, neuropsychology, and neuroimaging. Following this introductory segment, the course will move into a seminar format, with key articles presented at each meeting. All articles are available on Brightspace and the presentations will be led by you and your classmates. In the final segment of the course, you will have an opportunity to work on a capstone project, hear from graduate students about their path and research on neuropsychology, neuroimaging, and aging, and to share your project with the class.

Presentations

We will discuss a list of topics/assigned articles within the first week of classes. Afterwards, I will ask you to form groups of 2 or 3, depending on the number of students enrolled. Each group will present two times over the course of the term and each presentation will be worth 25% of your final grade (for a total of 50%). The articles that will be presented in this class have been selected to cover a broad range of topics. All of the articles are available on Brightspace for you. Your group will be asked to rank order your preferred topics/articles and I will sort out the presentation order balancing your top choices with our need to cover all
of the topics in the class. During class, your group will have approximately 30 minutes to conduct a presentation of your article and 15 minutes to lead a discussion. Grades will be assigned on the basis of quality (clarity, thoroughness and thoughtfulness) of the presentation, and the relevance of additional source information and synthesis of that information as well as the leadership of discussion. The presentation guidelines will be discussed during class.

*Please note that we may need to demonstrate some flexibility in group composition as the course add and drop deadlines mean that some students may move in and out of our class*

**Readings**

Engaging with the readings will enhance your learning and support discussion of the articles that we cover in class. This class will have 19 readings between January 23 and March 15. It is expected that each of you will form a discussion question on 10 of these readings (aside from the articles that you present on). Discussion questions can be short, but should be **thoughtful** (e.g. questioning concepts, criticisms of the paper, connections to other class material or another source). You will be given a point for each thoughtful discussion submitted over the course. I will ask you to **submit discussion questions on Brightspace by 5:00pm, the day before each class.**

**Participation in Class**

Class attendance is highly recommended (unless of course you are ill). During class, you will be expected to actively participate in discussions that will help you learn from one another. Hopefully the discussion questions you come up with based on the readings will serve as a jumping off point and you are encouraged to share your discussion question and thoughts with the class. It is important for us to create a safe and inclusive atmosphere with room for diverse perspectives. I expect us all to demonstrate professional etiquette and respect for one another.

**Capstone Project**

The capstone project will give you an opportunity to learn more about one area of neuropsychology, neuroimaging and/or aging that you are interested in. This project is intended to be creative, and you will have lots of flexibility and choice. Essentially, each of you will create a 2-page handout for the class on your topic of interest. Examples include detailing a published clinical case study, developing a research proposal, creating a patient-oriented brochure, outlining top priorities for research from the perspective of older adults (with their consent, de-identification and a full explanation of the project), showcasing work being done by organizations such as the Canadian Consortium on Neurodegeneration in Aging, the Indigenous Cognition and Aging Awareness Research Exchange, or the Alzheimer’s Society, or highlighting the work of an inspiring scholar. I am also open to other ideas you might have! I will give you class time to work on your project and I will be available to consult. In the last weeks of class (March 22, 27 and April 2, 3, 5), you will share your hand-out, and each provide a brief (~5-10 minute) presentation to the class on your project. Grades will be assigned for both your handout, which should be creative and include references, as well as your presentation, which should be organized, concise, and informative.

**Respect for Diversity**: It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students’ learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of all aspects of diversity. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.
**Policy on grading**
The final letter grade in the course will be based on the total percentage earned during the semester, as follows:

- **A+** (Exceptional work) = 90-100%
- **A** (Outstanding work) = 85-89%
- **A-** (Excellent work) = 80-84%
- **B+** (Very good work) = 77-79%
- **B** (Acceptable work) = 73-76%
- **B-** (Unacceptable work) = 70-72%
- **C+** (Unacceptable work) = 65-69%
- **C** (Unacceptable work) = 60-64%
- **D** (Unacceptable work) = 50-59%
- **F** (Failing grade) = 0-49%

In determining your final letter grade in the course, anything .5 and above will be rounded up to the next percentage score, and anything .4 and below will be rounded down to the previous percentage score. For example, 86.4% would be rounded to 86%, whereas 86.5% would be rounded to 87%. Students who have completed at least one presentation and the capstone project are considered to have completed the course. Failure to complete 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.

**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.

**Policy on artificial Intelligence:** The assignments and activities in this class are designed to increase the breadth and depth of your knowledge in the field of neuropsychology. Although generative artificial intelligence platforms such as ChatGPT may be helpful in some contexts, you will not get the most from this course by using these tools. The official course policy is that artificial intelligence must not be used to complete any part of the course requirements.

**Policy on 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 only using it to refer to the article we’re discussing. 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.
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: Sexualized violence resource office in EQHR, Sedgewick C119

Phone: 250.721.8021

Email: svpcoordinator@uvic.ca

Web: www.uvic.ca/svp
UNIVERSITY OF VICTORIA
Department of Psychology
Important Course Policy Information
Spring Session 2024

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 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 above 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>90-100</td>
<td>85-89</td>
<td>80-84</td>
<td>77-79</td>
<td>73-76</td>
<td>70-72</td>
<td>65-69</td>
<td>60-64</td>
<td>51-59</td>
<td>&lt; 50</td>
</tr>
<tr>
<td>GP Value</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Rounding is only applied to the final grade and is rounded up at the 0.5% level (e.g., 84.49% is round 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). The Department reserves the right to use AI detectors.

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 Fall 2023.

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/](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](http://uvicombudsperson.ca).


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 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!

Academic Important Dates

**Spring session – second term (January – April)**

<table>
<thead>
<tr>
<th>Term</th>
<th>Start Date</th>
<th>End Date</th>
<th>100% Fee Reduction</th>
<th>Add Deadline</th>
<th>50% Fee Reduction</th>
<th>Academic Drop no Fee Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second term</strong></td>
<td>Jan 8</td>
<td>Apr 8</td>
<td>Jan 21</td>
<td>Jan 24</td>
<td>Feb 11</td>
<td>Feb 29</td>
</tr>
</tbody>
</table>

Add and drop dates for standard 2023-2024 Winter Session courses

Monday, January 1\(^{st}\) University Closed (Winter Break)
Monday, January 8\(^{th}\) Second term classes begin for all faculties
Sunday, January 21\(^{st}\) Last day for 100% reduction of second term fees for standard courses 50% of tuition fees will be assessed for courses dropped after this date.
Wednesday, January 24\(^{th}\) Last day for adding courses that begin in the second term
Wednesday, January 31\(^{st}\) Last day for paying second term fees without penalty
Sunday, February 11\(^{th}\) Last day for 50% reduction of tuition fees for standard courses
Monday, February 19\(^{th}\) University Closed (Family Day)
February 19\(^{th}\) – 23\(^{rd}\) Reading Break for all faculties
Thursday, February 29\(^{th}\) Last day for withdrawing from second term courses without penalty of failure
Friday, March 29\(^{th}\) University Closed (Good Friday)
Monday, April 1\(^{st}\) University Closed (Easter Monday)
Monday, April 8\(^{th}\) Last day of classes for all faculties
Thursday, April 11\(^{th}\) Second term examinations begin for all faculties
Friday, April 26\(^{th}\) Second term examinations end for all faculties
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.

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/