

## Psychology 3137G 550 Cognition and Aging - Winter 2023

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### 1. Course Information

Course Name: Cognition and Aging  
 Course Number: Psychology 3137G  
 Instructor: Dr. Melissa Meade  
 Contact Information: [mmeade3@uwo.ca](mailto:mmeade3@uwo.ca)  
 Office: V104  
 Office Hours: By appointment  
 Class Location: W17  
 Scheduled Class Times: 10:30-12:20 Tuesdays & Thursdays  
 Prerequisites: [Psychology 2180E](#) and registration in the third or fourth year of Honours Specialization, Major in Psychology, or permission of the Department.

### 2. Course Description

This seminar course examines the role of aging on human cognitive processing. Topics discussed will include memory processes, attention, language as well as brain mechanisms and experiences related to ageing and cognition.

### 3. Course Learning Outcomes

By the end of this course, you should be able to:

- Explain and discuss theories and concepts within the field of cognitive aging
- Interpret and critically evaluate psychological research through reading and discussing scientific literature
- Interpret, summarize, and effectively communicate information through written work and presentation of research articles
- Generate an original research question, devise a study procedure, and hypothesize about implications through a written research proposal

### 4. Textbooks and Course Materials

Readings will consist of a pre-selected list of peer-reviewed journal articles addressing various topics in aging and cognition. All articles will be available in the course page on OWL.

### 5. Methods of Evaluation

Assignment	Date Due	Weight
Presentation		Total Weight 35%
Article presentation	Assigned article date	30%

	(Student presentations occurring Jan 31 <sup>st</sup> – Apr 4 <sup>th</sup> )	
Leading discussion of assigned article	Assigned article date	5%
<b>Participation</b>		<b>Total Weight 20%</b>
Participation in class discussion	Weekly	10%
Written reflections on class content	Lecture classes Jan 17 <sup>th</sup> – 26 <sup>th</sup>	5%
Submission of article questions prior to class (2 per article)	Student presentation classes Jan 31 <sup>st</sup> – Apr 4 <sup>th</sup>	5%
<b>Research Proposal</b>		<b>Total Weight 45%</b>
Research proposal article selection	February 7 <sup>th</sup>	2%
Research proposal topic	February 16 <sup>th</sup>	4%
Research proposal outline	March 16 <sup>th</sup>	4%
Final written research proposal	April 10 <sup>th</sup>	35%

### 5.1 Article Presentation

Over the course of term, each student will be required to present 1 research article from the pre-established set of readings and facilitate the following discussion that class. The article assigned to each student will be determined in the first week of class. This presentation will consist of a 10-15 minute overview of the research questions, methods, findings, and conclusions from the assigned article. Prior to the presentation, students will need to submit an outline of the planned presentation and discussion points. A grading rubric will be provided and discussed prior to student presentations.

### 5.2 Participation

Students are expected to do the readings and participate in discussion of the articles presented each class. During the lecture classes in the first few weeks of the course, students will be required to complete short reflections on the content covered that day. During the weeks involving student presentations, each student will be required to submit 2 questions about the article being presented prior to each class. Questions must be submitted for at least 15 articles.

### 5.3 Written Research Proposal

Each student will produce a formal APA style written proposal for a research project based on topics covered in this course. You will be required to choose a journal article covered in the

course, along with at least 1 other article of your choosing, to reference in support of your research idea. The research idea should build off the findings in the selected article. The written proposal will include introduction, methods, and discussion sections. This assignment does not involve actual data collection and can therefore involve any methodology that would best answer your research question. The discussion section will involve an overview of the conclusions you would make based on potential outcomes of your study design. In advance of beginning the written research proposal, there will be check-points involving article selection, identifying the planned topic, and providing a brief outline of the research proposal. A grading rubric will be provided and discussed.

### 6. Tentative Class Schedule/ Syllabus

Date	Topic	Reading
Jan 10	Overview of Class	Syllabus
Jan 12	Presentation skills workshop	The Montreal Cognitive Assessment, MoCA: A Brief Screening Tool For Mild Cognitive Impairment (Nasreddine et al., 2005)
Jan 17	Lecture on Behavioral Models of Aging: Sensory Deficit Hypothesis, Speed of Processing, Inhibitory Deficit Hypothesis	No outside reading required
Jan 19	Lecture on Behavioral Models of Aging: Recollection Deficits, Binding Deficits, Deficits in Self-initiated Processing	No outside reading required
Jan 24	Lecture on Brain-Based Models of Aging: Compensation, Dedifferentiation, Default Mode Network	No outside reading required
Jan 26	Lecture on Scaffolding Theory of Aging and Cognition	No outside reading required
Jan 31	Cognitive Reserve	Cognitive reserve moderates relation between global cognition and functional status in older adults (Duda et al., 2014)
Feb 2	Cognitive Reserve	Does Bilingualism Influence Cognitive Aging? (Bak et al., 2014)
Feb 7	Brain Changes	Head Circumference, Education and Risk of Dementia: Findings from the Nun Study (Mortimer et al., 2003)
Feb 7	Due: Article selection for Research Proposal	
Feb 9	Brain Changes	Age Differences in Deactivation: A Link to Cognitive Control? (Persson et al., 2007)

Feb 14	Top-down Processing	Top-down suppression deficit underlies working memory impairment in normal aging (Gazzaley et al., 2005)
Feb 16	Top-down Processing	The Effects of Aging on Sustained Attention Ability: An ERP Study (Staub et al 2014)
Feb 16	Due: Research Proposal Topic	
Feb 20	Winter Reading Week (Feb 18-26), no class	
Feb 28	Executive Function	Hyper-Binding: A Unique Age Effect (Campbell et al., 2010)
Mar 2	Executive Function	The Role of Suppression in Resolving Interference: Evidence for an Age-Related Deficit (Healy et al., 2013)
Mar 7	Episodic Memory	Older adults' associative deficit in episodic memory: Assessing the role of decline in attentional resources (Naveh-Banjamin et al., 2004)
Mar 9	Episodic Memory	Does Aging Affect Recall More Than Recognition Memory? (Danckert et al, 2013)
Mar 14	Autobiographical Memory	Aging and Autobiographical Memory: Dissociating Episodic From Semantic Retrieval (Levine et al., 2002)
Mar 16	Autobiographical Memory	Executive function and emotional focus in autobiographical memory specificity in older adults (Holland et al., 2012)
Mar 16	Due: Research Proposal Outline	
Mar 21	Emotional Processing	The Positivity Bias in Aging: Motivation or Degradation? (Kalenzaga et al., 2016)
Mar 23	Emotional Processing	Aging, Emotion, and Health-Related Decision Strategies: Motivational Manipulations Can Reduce Age Differences (Lockenhoff et al., 2007)
Mar 28	Social Engagement	The differential relationships of dimensions of perceived social support with cognitive function among older adults (Pillemer et al., 2016)
Mar 30	Social Engagement	Social Network, Activity Participation, and Cognition: A Complex Relationship (Litwin et al., 2016)
Apr 4	Mental Health	Performance in Autobiographical Memory of Older Adults with Depression Symptoms (Latorre et al., 2013)
Apr 6	In-class time to work on research proposal	No outside reading required

Apr 10	Due: Written Research Proposal
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## 6. FASS Appendix



### Appendix to Course Outlines: Academic Policies & Regulations Fall/Winter 2022-2023

Huron will continue to follow the guidance of public health and government officials. It is anticipated that there will be no disruptions to in-person instruction. This is subject to change.

#### **Student Code of Conduct**

Membership in the community of Huron University College and Western University implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. While in the physical or online classroom, students are expected to behave in a manner that supports the learning environment of others. Please review the Student Code of Conduct at:

<https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf>.

#### **Prerequisite and Antirequisite Information**

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites. Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

#### **Attendance Regulations for Examinations**

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and

with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Review the policy on Attendance Regulations for Examinations here: [Academic Calendar - Western University \(uwo.ca\)](#)

### **Statement on Academic Offences**

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: [Academic Calendar - Western University \(uwo.ca\)](#). The appeals process is also outlined in this policy as well as more generally at the following website: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/appealsundergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/appealsundergrad.pdf).

### **Turnitin.com**

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

### **Statement on Use of Electronic Devices**

It is not appropriate to use electronic devices (such as, but not limited to, laptops, tablets, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

### **Statement on Use of Personal Response Systems (“Clickers”)**

Personal Response Systems (“clickers”) may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else’s clicker in class constitutes a scholastic offence
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

### **Academic Consideration for Missed Work**

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. **Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work, and are encouraged to make appropriate decisions based on their specific circumstances.**

Students who have conditions for which academic accommodation is appropriate, such as disabilities or ongoing or chronic health conditions, should work with Accessible Education Services to determine

appropriate forms of accommodation. Further details concerning policies and procedures may be found at: <http://academicsupport.uwo.ca/>.

### **Policy on Academic Consideration for a Medical/ Non-Medical Absence**

#### **(a) Consideration on Medical Grounds for assignments worth *less than 10%* of final grade: Consult Instructor Directly and Contact Academic Advising**

When seeking consideration on **medical grounds** for assignments worth *less than 10%* of the final course grade, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. If documentation is requested, the student will need to complete and submit the [Student Medical Certificate](#). The instructor may not collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation.

#### **b) Medical Grounds for assignments worth 10% or more of final grade: Go Directly to Academic Advising**

University Senate policy, which can be found at [Academic Calendar - Western University \(uwo.ca\)](#) requires that all student requests for accommodation on medical grounds for assignments worth 10% or more of the final grade be made directly to the academic advising office of the home faculty (for Huron students, the “home faculty” is Huron), with supporting documentation in the form (minimally) of the Senate-approved Student Medical Certificate found at: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

The documentation is submitted in confidence and will not be shown to instructors. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Dean. The instructor’s decision is appealable to the Dean.

#### **c) Consideration on Non-Medical Grounds: Consult Huron Support Services/Academic Advising, or email [huronsss@uwo.ca](mailto:huronsss@uwo.ca).**

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation. All consideration requests must include a completed [Consideration Request Form](#). Late penalties may

apply at the discretion of the instructor.

Please review the full policy on Academic Consideration for medical and non-medical absence at: [accommodation\\_medical.pdf \(uwo.ca\)](#). Consult [Huron Academic Advising](#) at [huronsss@uwo.ca](mailto:huronsss@uwo.ca) for any further questions or information.

### **Support Services**

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation, students should email an Academic Advisor in Huron's Student Support services at [huronsss@uwo.ca](mailto:huronsss@uwo.ca). An outline of the range of services offered is found on the Huron website at: <https://huronatwestern.ca/student-life/student-services/>.

Department Chairs, Program Directors and Coordinators are also able to answer questions about individual programs. Contact information can be found on the Huron website at: <https://huronatwestern.ca/contact/faculty-staff-directory/>.

If you think that you are too far behind to catch up or that your workload is not manageable, you should consult your Academic Advisor. If you are considering reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines. Please refer to the Advising website, <https://huronatwestern.ca/student-life/student-services/academic-advising/> or review the list of official Sessional Dates on the Academic Calendar, available here: <http://www.westerncalendar.uwo.ca/SessionalDates.cfm>.

You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP and/or Scholarship/Bursary eligibility.

Huron Student Support Services: <https://huronatwestern.ca/student-life/student-services/> Office of the Registrar: <https://registrar.uwo.ca/>  
Student Quick Reference Guide: <https://huronatwestern.ca/student-life/student-services/#1> Academic Support & Engagement: <http://academicsupport.uwo.ca/>  
Huron University College Student Council: <https://huronatwestern.ca/student-life/beyond-classroom/hucsc/>  
Western USC: <http://westernusc.ca/your-services/#studentservices>

### **Wellness and Health Supports at Huron and Western**

University students may encounter setbacks from time to time that can impact academic performance. Huron offers a variety of services that are here to support your success and wellbeing. All Huron staff and faculty have received training on responding to disclosures of Gender-Based Sexual Violence (GBSV); students should know that the Community Safety Office is a resource for survivors, providing support and, if desired, guidance while referring them to the further supports that they may require. Please visit <https://huronatwestern.ca/student-life-campus/student-services/wellness-safety> for more information or contact staff directly:

#### **Wellness Services:**

[huronwellness@huron.uwo.ca](mailto:huronwellness@huron.uwo.ca) Community

Safety Office: [safety@huron.uwo.ca](mailto:safety@huron.uwo.ca)

Additional supports for Health and Wellness may be found and accessed at Western



through, <https://www.uwo.ca/health/>.

**Western Calendar - Policy Pages -**  
[Academic Calendar - Western University \(uwo.ca\)](#)