

Course Schedule

Important: **ALL TIMES EASTERN** - Please see the [University Policies](#) section of your Course Outline for details

NOTE: Students can earn an additional bonus 2% by taking part in the **Bonus Credit: Experiential Learning in Research**. More information on this can be found under Activities and Assignments in this course. If you plan to do this, you should start this process early in the term.

Week	Module	Activities and Assignments	Due Date	Weight (%)	
Weeks 1 and 2	Module 1: Intro to Goals and Ethics in Research	Groups for Discussion Activities will be created by Technical Support	Check after Wednesday, January 5, 2022 at 8:00 AM		
		Introduce Yourself	Sunday, January 16, 2022 at 11:59 PM	Ungraded	
		Assignment: CORE Training Certificate	Sunday, January 16, 2022 at 11:59 PM	4%	
		CORE Ethical Training	Discussion 1 — Research Ethics and 'Big Data'	This discussion will be open from Wednesday, January 5, 2022 at 12:01 AM and close on Wednesday, January 19, 2022 at 11:59 PM	1%
				Your first post is due by Friday, January 14, 2022	
Week 3	Module 2: Hypothesis, Tests, and Operationalization	End of Module 1 Quiz	Wednesday, January 19, 2022 at 11:59 PM	1%	
		End of Module Assignment 1: Literature Search	Wednesday, January 26, 2022 at 11:59 PM	4%	
		Psychology 291 Research Guide	Discussion 2 — Operationalization of Gaslighting	This discussion will be open from Wednesday, January 19, 2022 at 12:01 AM and close on Wednesday, January 26, 2022 at 11:59 PM	1%
			Your first post is due by Friday, January 21, 2022		
Week 4	Module 3: Validity in Research Design	End of Module 2 Quiz	Wednesday, January 26, 2022 at 11:59 PM	1%	
		End of Module 3 Quiz	Wednesday, February 2, 2022 at 11:59 PM	1%	
		End of Module Assignment 2: Randomizer	Wednesday, February 9, 2022 at 11:59 PM	4%	
Week 5	Module 4: Participant Sampling	Discussion 3 — Culture and Sampling	This discussion will be open from Wednesday, February 2, 2022 at 12:01 AM and close on Wednesday, February 9, 2022 at 11:59 PM	1%	
			Your first post is due by Friday, February 4, 2022		
			Wednesday, February 9, 2022 at 11:59		

		End of Module 4 Quiz	PM	1%
Week 6	Module 5: Reliability and Validity in Measurement	Discussion 4 — "Dangerous Minds": Exploring Reliability and Validity	This discussion will be open from Wednesday, February 9, 2022 at 12:01 AM and close on Wednesday, February 16, 2022 at 11:59 PM	1%
			Your first post is due by Friday, February 11, 2022	
		End of Module 5 Quiz	Wednesday, February 16, 2022 at 11:59 PM	1%
Reading Week (Saturday, February 19, 2022 to Sunday, February 27, 2022)				
Weeks 7 and 8	Module 6: Survey Design	Discussion 5 — Facebook and Mapping Response Options	This discussion will be open from Wednesday, March 2, 2022 at 12:01 AM and close on Wednesday, March 9, 2022 at 11:59 PM	1%
			Your first post is due by Friday, March 4, 2022	
Weeks 9 and 10	Module 7: The Logic of Experimentation	Assignment: Midterm	Wednesday, March 9, 2022 at 11:59 PM	22%
		End of Module 6 Quiz	Wednesday, March 9, 2022 at 11:59 PM	1%
		End of Module Assignment 3: Article Review Part 1	Wednesday, March 23, 2022 at 11:59 PM	8%
		End of Module 7 Quiz	Wednesday, March 23, 2022 at 11:59 PM	1%
Weeks 11 and 12	Module 8: Experimental Designs	End of Module Assignment 4: Article Review Part 2	Tuesday, April 5, 2022 at 11:59 PM	8%
		End of Module 8 Quiz	Tuesday, April 5, 2022 at 11:59 PM	1%
		Think and Respond Questions and Workbook	Tuesday, April 5, 2022 at 11:59 PM	2%
		Bonus Credit: Experiential Learning in Research	Tuesday, April 5, 2022 at 11:59 PM	2%
Final Online Examination			Opens: Sunday, April 17, 2022 at 12:00 AM	35%
			Closes: Monday, April 18, 2022 at 11:59 PM	

Time Management

There are eight modules in this course that are divided over 12 weeks. This means that some modules will likely take students more than a week to complete, including assignments and discussions. The visual below may help you to plan your time effectively.



[Alternate text format](#)

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Description of Workload Graph

This bar graph shows 8 bars, each representing an estimate of the workload for each of the 8 modules. Notice that some weeks have a greater workload than others. In general, the modules with a higher workload (modules 1, 6, 7, and 8) are given 2 weeks in the course schedule. In addition, there are several different learning tasks for each module, which are represented by different colours within each bar (module) on the graph. These learning tasks are:

- Module content (text and visuals in the course module pages)
- Online readings (links to online articles)
- Think and Respond questions (within the workbook and the module pages)
- Quiz (End of Module Quiz)
- Discussions
- Assignments

Notice that some of these learning tasks vary in size from module-to-module. The visual provides an estimate of proportion of workload and is not a direct or absolute measure of time, as time on task will differ from student-to-student. Effective time management will require students to also rely on their own awareness of how long different tasks tend to take them (i.e., how fast one reads and absorbs information).

Contact Information

Announcements

Your instructor uses the **Announcements** widget on the **Course Home** page during the term to communicate new or changing information regarding due dates, instructor absence, etc., as needed. You are expected to read the announcements on a regular basis.

To ensure you are viewing the complete list of announcements, you may need to click **Show All Announcements**.

Discussions

A [General Discussion](#) topic* has been made available to allow students to communicate with peers in the course. Your instructor may drop in at this discussion topic.

Contact Us

Who and Why

Contact Details

Instructor and TA

- Course-related questions (e.g., course content, deadlines, assignments, etc.)
- Questions of a personal nature

Post your course-related questions to the [Ask the Instructor](#) discussion topic*. This allows other students to benefit from your question as well.

Questions of a personal nature can be directed to your instructor or your TA.

Instructor: Emily Cyr
encyr@uwaterloo.ca

The TA will be assigned during the first week of class and this information will be provided through the Announcements widget on the Course Home page as it becomes available. Please check the announcements regularly.

Your instructor checks email and the [Ask the Instructor](#) discussion topic* frequently and will make every effort to reply to your questions within 24–48 hours, Monday to Friday.

learnhelp@uwaterloo.ca

Technical Support, Centre for Extended Learning

- Technical problems with Waterloo LEARN

Include your full name, WatIAM user ID, student number, and course name and number.

Technical support is available during regular business hours, Monday to Friday, 8:30 AM to 4:30 PM (Eastern Time).

[IST Knowledge Base: For Students](#)

[Maplesoft Customer Support](#)

support@maplesoft.com

Maple Player Support

- Questions about Maple Player

TCPS CORE Support

- Questions about TCPS CORE

[Panel on Research Ethics: Contact us](#)

Learner Support Services,
Centre for Extended Learning

[Student Resources](#)

extendedlearning@uwaterloo.ca

- General inquiries
- Examination information

Include your full name, WatIAM user ID, student number, and course name and number.

*Discussion topics can be accessed by clicking **Connect** and then **Discussions** on the course navigation bar above.

Course Description and Learning Outcomes

Course Description

People are naturally curious about one another's behaviour patterns and their underlying causes. Psychological questions are a popular topic both in everyday conversations and in popular media. For example, we discuss such questions as:

- How can we evaluate whether a new type of therapy is effective for treating psychological disorders?
- How can two people who grew up in the same household sometimes have very different personalities?
- Why do people make decisions that they later regret even though the harmful consequences were foreseeable?
- What determines whether a romantic couple will stay together or break up?

These examples barely scratch the surface of the questions about human psychology that we wonder about on a daily basis. Research methods encompass the principles and strategies that guide how psychologists collect and interpret information to answer these sorts of questions in order to build an accurate understanding of the mind and behaviour. This course will provide you with an overview of the variety of methods that researchers use to build this knowledge. We will review the rationale for using particular methods and the principles for evaluating the quality of these methods. Though this course is focused on psychological research methods, much of the knowledge you will gain through this course transfers to other domains, outside of academic psychological research.

In particular this course aims to provide tools that will equip you to

- think more critically about psychological research that you may come across in your studies or through popular media,
- prepare you to conduct well-designed psychological investigations of your own,
- become a more informed and critical consumer of research, and
- be a more effective observer of behaviour in everyday life.

Overview of Course Content

This course begins with important ethical considerations that first must be considered when conducting research. It touches on methods for generating hypotheses, developing one's skill in generating insightful hypotheses, and assessing the validity of hypotheses. Specifically, this course will provide students with the opportunity to explore important topics and skills in psychological research including how to

- sample behaviour,
- test the reliability and validity of measures,

- design scales that elicit meaningful responses,
- design experiments that effectively test hypotheses about psychological phenomena, and
- assess the relative strengths and limitations of different methodologies including self-report surveys, lab experiments, and field studies.

Learning Outcomes

By the end of this course students will be able to

1. critically evaluate research as it is presented in popular media and academic articles,
2. discuss and evaluate techniques that researchers use to test the reliability and validity of measures,
3. distinguish and evaluate the strengths and limitations of alternative research designs,
4. recognize the value of experimental methods for testing hypotheses about psychological causes, and
5. strategically search a library database to identify relevant research articles on a topic of interest.

Important Features of the Course

This course provides many opportunities to engage with the course material, test your knowledge, build skills, and interact with your peers and instructor.

Think and Respond Self-Assessment and Workbook Questions

Think and Respond interactive questions and workbook questions are embedded in the learning modules and will provide you with an opportunity to test your knowledge and provide important feedback with content that may not appear elsewhere in the course. These self-assessment questions are a core aspect of this course. For the open response questions (e.g., not multiple choice) you are strongly encouraged to record your answers in the workbook provided. You should then return to the module pages to check your answer. It is critical that you 'click' to check your answer, as this will reveal important feedback, containing content that may not appear elsewhere in the course. Skipping these questions and not checking the feedback will result in missing some core content and knowledge that will be tested in various different graded assessments in this course (i.e., assignments, quizzes, and final examination).

Discussions

Discussions provide an opportunity to test out ideas and practice using important concepts. Discussion groups will be created with 10-15 students per group. Discussions will be graded, with the exception that each student make a meaningful contribution to the discussion and respond to other group member's posts. The final examination will also contain a question that pertains to these discussions, so participating throughout the term is highly recommended.

Assignments

Assignments are designed to assess your understanding of key concepts from the course modules through structured exercises. These assignments will challenge you to apply your understanding of key concepts to complete practical tasks and to evaluate the quality of specific research designs. The completion of these assignments will allow you to put your knowledge into practice and demonstrate your learning of research principles in a variety of ways.

End of Module Quizzes

End of Module Quizzes are composed of multiple choice questions. These are designed to help keep you on track, assess your learning and provide a lower-stakes opportunity to demonstrate your learning throughout the course.

This online course was developed by Richard Eibach, with instructional design and multimedia development support provided by the Centre for Extended Learning. Further media production was provided by Instructional Technologies and Multimedia Services.

About the Course Author

Course Author — Richard Eibach

Educational Background



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Richard was educated at Cornell University where he received his BA in 1993 and his PhD in Psychology in 2003.

Current Research

Richard is a social psychologist who studies the connections between self-perceptions and social judgment. His research focuses on such topics as how visual imagery relates to self-perception, the influence of ideology and group interests on perceptions of social justice, and how people experience and express intersectional identities.

Philosophy of Teaching

Richard's philosophy of teaching aligns with the constructivist theory of learning, believing that learning is an active process in which students construct new ideas or concepts based upon their current and past knowledge.

Hobbies/Interests

Richard is an avid reader. He especially enjoys reading social histories that focus on periods of cultural transition and studies of social movements. Richard is currently a member of the Waterloo Region Crime Prevention Council which fosters public awareness of root causes of crime and promotes community-based action to create sustainable change.

Family

Richard is married to Steven Mock, a developmental psychologist and faculty member in UW's Recreation and Leisure Studies program. Richard and Steven are the proud uncles of a niece and two nephews.

Materials and Resources

Textbooks

There are no required textbooks for this course.

Course Reserves

The following article for End of Module Assignments 3 and 4 can be found in course reserves:

- Langer, E. J., & Rodin, J. (1976). The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting. *Journal of Personality and Social Psychology*, 34(2), 191-198. doi:10.1037/0022-3514.34.2.

Course Reserves can be accessed using the **Library Resources** widget on the **Course Home** page.

Other Materials and Resources

1. [Research Ethics \(TCPS 2: CORE\) Tutorial](#)  (Module 1)
2. [Psychology 291 Research Guide](#)  (University of Waterloo Library) (Module 2)
3. [Download Maple Player](#)  (Module 4)
Note: For instructions on how to download and use this application please go to Module 4d
4. Library services for [Co-op students on work term and students taking online courses](#) 

Grade Breakdown

The following table represents the grade breakdown of this course.

Activities and Assignments	Weight (%)
Introduce Yourself	Ungraded
Think and Respond Workbook	2%
Assignment: CORE Training Certificate	4%
Discussions (concepts tested on final examination)	5%
End of Module Quizzes (8 x 1%)	8%
End of Module Assignments (2 x 4% and 2 x 8%)	24%
Assignment: Midterm	22%
Bonus Credit: Experiential Learning in Research	2%
Final Examination	35%

Official Grades

Official Grades and Academic Standings are available through [Quest](#)  .

Course and Department Policies

Course Policies

Independent work on assignments and quizzes

All quizzes involve independent work. The answers that you submit to quizzes should be your own independent work without any collaboration or discussion with others. If you have questions about any of the content of the quizzes these should be directed to the TAs or the course instructor, not to other students or anyone outside the course. Also, after you complete the quiz it is not permissible to share the answers with other students or anyone else. The quiz contents and answers belong to this course and you may not share or distribute them to others without the instructor's permission.

It is permissible to discuss the assignments with other students and collaborate with others in developing your thoughts. Indeed, you are encouraged to engage in such collaboration if this will help you to learn the material and reason through the assignment questions. However, the final answers that you submit for each assignment should be composed by you and written in your own words. If identical responses are submitted by different students this will be considered a violation of the course policy and will be marked zero and reported to the Associate Dean following the procedures described in the University Policies section of the syllabus.

Deadlines for assignments and quizzes

All assignments and quizzes must be submitted by the scheduled deadlines to receive credit. Any assignments or quizzes that are submitted after their scheduled deadlines will not be graded unless an extension was approved by the course instructor to accommodate a documented extenuating circumstance.

Accommodation for course requirements

Students requesting accommodation for course requirements (assignments, quizzes, final examinations, etc.) due to illness should follow the procedures described in the University Policies section of the syllabus.

In the case of a missed final examination, see the accommodations described in 'University Policies' section of the syllabus.

In the the case of a missed assignment deadline or quiz, the instructor will either

- waive the course component and re-weight remaining term work as he/she deems fit according to circumstances and the goals of the course, or
- provide an extension.

In the case of bereavement, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.

Students who are experiencing extenuating circumstances should also inform their academic advisors regarding their personal difficulties.

Elective arrangements such as travel plans are not acceptable grounds for granting accommodations to course requirements per the [Academic regulations related to assignments, tests, and final exams](#).

Department Policies

Informal resolution of conflict

We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Department Chair (Colin MacLeod) is available for consultation and to mediate a resolution between the student and instructor: Email: cmacleod@uwaterloo.ca; Ph 519-888-4567, ext. 32546.

If informal resolution is not possible then the issue may proceed to the grievance and appeals stage as described in the University Policies section of the syllabus.

Using official UW email

Students are responsible for all email that is sent to the official UWaterloo email address. Check email regularly for important and time sensitive messages. See [Statement on official student email address](#) for further details e.g., procedures and warnings regarding forwarding email to other accounts.

University Policies

Submission Times

Please be aware that the University of Waterloo is located in the **Eastern Time Zone** (GMT or UTC-5 during standard time and UTC-4 during daylight saving time) and, as such, the time that your activities and/or assignments are due is based on this zone. If you are outside the Eastern Time Zone and require assistance with converting your time, please try the [Ontario, Canada Time Converter](#) .

Accommodation Due to Illness

If your instructor has provided specific procedures for you to follow if you miss assignment due dates, term tests, or a final examination, adhere to those instructions. Otherwise:

Missed Assignments/Tests/Quizzes

Contact the instructor as soon as you realize there will be a problem, and preferably within 48 hours, but no more than 72 hours, have a medical practitioner complete a [Verification of Illness Form](#) .

Email a scanned copy of the Verification of Illness Form to your instructor. In your email to the instructor, provide your name, student ID number, and exactly what course activity you missed.

Further information regarding Management of Requests for Accommodation Due to Illness can be found on the [Accommodation due to illness](#) page.

Academic Integrity

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect, and responsibility. **If you have not already completed the online tutorial regarding academic integrity you should do so as soon as possible.** Undergraduate students should see the [Academic Integrity Tutorial](#) and graduate students should see the [Graduate Students and Academic Integrity](#) website.

Proper citations are part of academic integrity. Citations in CEL course materials usually follow CEL style, which is based on APA style. Your course may follow a different style. If you are uncertain which style to use for an assignment, please confirm with your instructor or TA.

For further information on academic integrity, please visit the [Office of Academic Integrity](#) .

Turnitin

Turnitin.com: Text matching software (Turnitin®) may be used to screen assignments in this course.

Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin® in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.

[Turnitin® at Waterloo](#) 

Discipline

A student is expected to know what constitutes [academic integrity](#)  to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration, should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to [Policy 71 - Student Discipline](#) . For typical penalties, check [Guidelines for the Assessment of Penalties](#) .

Appeals

A decision made or penalty imposed under [Policy 70 - Student Petitions and Grievances](#) , (other than a petition) or [Policy 71 - Student Discipline](#) , may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#) .

Grievance

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70 - Student Petitions and Grievances](#) , Section 4. When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

Final Grades

In accordance with [Policy 46 - Information Management](#) , Appendix A - Access to and Release of Student Information, the Centre for Extended Learning does not release final examination grades or final course grades to students. Students must go to [Quest](#)  to see all final grades. Any grades posted in Waterloo LEARN are unofficial.

AccessAbility Services



[AccessAbility Services](#) , located in Needles Hall, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodation to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term and for each course.

Accessibility Statement

The Centre for Extended Learning strives to meet the needs of all our online learners. Our ongoing efforts to become aligned with the [Accessibility for Ontarians with Disabilities Act \(AODA\)](#) are guided by University of Waterloo accessibility [Legislation](#) and policy and the [World Wide Web Consortium's \(W3C\) Web Content Accessibility Guidelines \(WCAG\) 2.0](#) . The majority of our online courses are currently delivered via the Desire2Learn Learning Environment. Learn more about [Desire2Learn's Accessibility Standards Compliance](#) .

Use of Computing and Network Resources

Please see the [Guidelines on Use of Waterloo Computing and Network Resources](#) .

Copyright Information

UWaterloo's Web Pages

All rights, including copyright, images, slides, audio, and video components, of the content of this course are owned by the course author, unless otherwise stated. These web pages are owned or controlled by the University of Waterloo, Centre for Extended Learning. By accessing the web pages, you agree that you may only download the content for your own personal, non-commercial use. You are not permitted to copy, broadcast, download, store (in any medium), transmit, show or play in public, adapt, or change in any way the content of these web pages for any other purpose whatsoever without the prior written permission of the course author and the University of Waterloo, Centre for Extended Learning.

Other Sources

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If there are any questions about this notice, please contact the University of Waterloo, Centre for Extended Learning, Waterloo, Ontario, Canada, N2L 3G1 or extendedlearning@uwaterloo.ca.

