



PSYCHOLOGY 2840G (570)
Research Methods in Psychology
Fall/Winter 2025-2026

Instructor: Dr. Kathleen Lyons
Email: klyons8@uwo.ca

Course Information

Calendar Description:

This course is an introduction to basic issues in psychological research. Topics covered include issues in observation and measurement, ethics, and basic issues involved in doing both non-experimental and experimental research.

Prerequisite(s): At least 60% in a 1000 level Psychology course; [Mathematics 1228A/B](#) and [Statistical Sciences 1024A/B](#).

Antirequisite(s): [Psychology 2830A/B](#), [Psychology 2855F/G](#), [Psychology 2856F/G](#), [Psychology 2801F/G](#), [Psychology 2802F/G](#), the former Psychology 2800E, the former Psychology 2820E.

Extra Information: 2 lecture hours, 2 laboratory hours.

Course Weight: 0.50

Breadth: Category A

Subject Code: PSYCHOL

Notice: Unless you have either the requisites for this course (fulfilment of pre-requisites, no anti-requisite conflicts), or special permission from your Dean to enrol 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.

Psychology 2840G: Research Methods in Psychology

King's University College at Western University

Winter 2025-2026

1. Instructor Information

Professor: Dr. Kathleen Lyons (she/her)

Office Hours: Posted on OWL Brightspace

Office Location: Posted on OWL Brightspace

Email: klyons8@uwo.ca

Mode of instruction: in-person

How to contact me:

Please email me from your UWO email address and include the class course number in the subject line. I will do my best to respond within 48 business hours (Monday to Friday, 9 am to 5 pm). If you don't hear from me within this window, please feel free to reach out to me again to ensure the email didn't get lost (or put into spam!).

If you would like to meet with me outside of my student hours, please email me to set up an appointment.

2. Land Acknowledgement

We acknowledge that our campus at King's University College is situated on the traditional territories of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum.

With this, we respect the longstanding relationships that Indigenous Nations have to this land, as they are the original caretakers. We acknowledge historical and ongoing injustices that Indigenous Peoples (First Nations, Métis and Inuit) endure in Canada, and we accept responsibility as a public institution to contribute toward revealing and correcting miseducation, as well as renewing respectful relationships with Indigenous communities through our teaching, research, and community service.

3. Course Information

Course Name: Research Methods in Psychology

Course Number: Psychology 2840G (570)

Course website: <https://owl.uwo.ca/portal>

Course description: This course is an introduction to basic issues in psychological research. Topics covered include issues in observation and measurement, ethics, and basic issues involved in doing both non-experimental and experimental research.

The purpose of this course is to get hands-on experience in conducting and critically thinking about research in psychology. We will cover all components of the scientific process,

including developing a hypothesis, the design and implementation of scientific studies, collection and analysis of data, and the dissemination of research findings. Expect that this course will be challenging and time consuming, but with long-term payoffs for your development as both a producer and consumer of psychological research.

Learning Outcomes

Students who successfully complete this course will be able to:

- Be critical consumers of scientific information.
- Formulate research questions and testable hypotheses.
- Understand the strengths and limitations of different statistical tests and study designs.
- Interpret graphs and statistical evidence to draw conclusions from data.
- Identify potential sources of bias in research.
- Apply guidelines for ethical research and complete an ethics protocol.
- Communicate research findings in multiple forms, including APA-format research papers and oral presentations.
- Define, identify, and generate the following: independent variable, dependent variable, control variable, subject variable, confound, within-subject variable, between-subject variable, operational definition, rival hypothesis, sample.
- Differentiate and critically evaluate frequency, association, and causal claims in scientific articles and in the media.
- Define and assess construct validity, statistical validity, internal validity, and external validity.
- Find, read, and evaluate scientific articles in psychology.
- Select the appropriate research methodology, design, variables and operational definitions to address a research question.
- Define, identify, and avoid the illusion of cause.

4. Course Materials

Course textbook: Morling, B. (2025). *Research methods in psychology: Evaluating a world of information (5th edition)*. New York, NY: Norton

Or

Morling, B. (2021). *Research methods in psychology: Evaluating a world of information (4th edition)*. New York, NY: Norton

Additional readings will be provided on the course OWL site.

The textbook is available for purchase at the bookstore for \$99.83 CAD for the e-book and \$151.95 CAD for the hard copy. There will also be two hardcopies of the 4th edition of the textbook on reserve at the King's Library. You can sign these out for 2-hours at a time. Students are welcome to purchase second-hand editions of this textbook. The 4th and 5th editions of the textbooks are both acceptable for the course.

OWL Brightspace: Course related announcements and additional material will be posted on the course OWL site, found here: <https://westernu.brightspace.com/>

iClicker: You will need a laptop/tablet/mobile phone to use iClicker tool in class (be sure to charge your devices prior to class time). Instructions on setting up iClicker can be found on the OWL Brightspace site.

5. Course Schedule

*Subject to change with notice given on OWL.

Week	Lecture	Textbook Readings
09-Jan-25	Psychology as a way of thinking	Chapter 1 & 2
16-Jan-25	Claims and research ethics	Chapter 3 & 4
23-Jan-25	Descriptive research questions	Chapter 5, 7, & Descriptive Statistics Review (p. 467 – 489)
30-Jan-25	Introduction to experiments	Chapter 10 & The illusions of causality article
06-Feb-25	Experimental design problems	Chapter 11 & 13
13-Feb-25	Hypothesis testing (group comparisons)	Inferential statistics review (p. 491 – 522)
20-Feb-25	Reading week - No Class	No Readings
27-Feb-25	Survey designs & correlational methods; Midterm on the Saturday at 9:30 AM	Chapter 6 & 8 (not on midterm)
06-Mar-25	Correlation coefficients	Inferential statistics review (p. 491 – 522)
13-Mar-25	Multivariate designs #1 – Factorial designs	Chapter 12
20-Mar-25	Multivariate designs #2 - Regression	Chapter 9
27-Mar-25	The replication crisis & EDID in Research	Chapter 14 & WEIRD article
03-Apr-25	Good Friday - No Class	No readings
10-Apr-25	Study Day - No Class	
Final Exam Period	Final exam scheduled by the registrar	

6. Methods of Evaluation

Midterm exam	20%
Final exam (cumulative)	30%
In-Class Questions	5%
Lab component	45%

6.1 Exams (50%)

The midterm exam will cover all lecture content from week 1 to 6, the associated textbook chapters, and additional assigned readings. The midterm will consist of short answer and multiple choice questions. The midterm is scheduled for Saturday, February 28th at 9:30 – 11:30 AM time in Room LH 100.

The final exam will be held during the April exam period and will cover *all* course lectures and associated chapters and readings (note: the final is cumulative). The final exam will consist of short answer and multiple choice questions.

6.2 In-class Questions (5%)

Research has shown that class attendance and regular review are strong predictors of academic success (Credé et al., 2010; Karpicke & Roediger, 2008). For this reason, 5% of your course grade will come from in-class iClicker questions. iClicker questions will be posted on lecture slides, and you will log in to the course OWL site on your mobile device or laptop and click on the iClicker tool to answer the questions. iClicker questions will start the second week of class and will happen every week except for the week of the midterm.

You may use your notes and discuss with your peers before answering, but you may not use external sources (e.g., google, Chat GPT).

You can drop your lowest 2 weekly participation grades to account for illness and missed class time. Please note: because not all elements of this component are required in the calculation of the final course grade, **the instructor reserves the right to deny academic consideration for these missed elements.**

6.3 Lab Component

The **lab component** is detailed in the separate lab syllabus.

*****NOTE: Students must pass both the lecture and the lab component to pass the course. Students failing either portion will receive a final grade in the course of 49% or the grade earned, whichever is less.****

7. Course Expectations

To be successful in this course, I encourage students to:

- Complete the assigned readings *prior* to class.
- Attend all classes.
- Attend all labs.
- Actively participate in both in-class and in-lab assignments.
- Check OWL site regularly for updates.

8. Course Policies

8.1 Policy on Academic Consideration

All students in this course are expected to attend class regularly and complete their work on time. However, situations may arise that are unexpected and prohibit you from attending class and/or submitting your work on time.

Students can use their one request for academic consideration without supporting documentation for the in-class questions, reading quizzes, or midterm. They cannot use their one request for academic consideration without supporting documentation for any of the components of the lab (please see lab syllabus for more information).

The in-class questions and reading quizzes are low-stakes components and cannot be made up, but the two lowest grades from both components will be dropped to account for illness.

Students unable to take a midterm who have received Academic Consideration will be provided with a make-up exam. Please note this exam may not be the same as the original assessment. **Note: Only one make-up midterm will be offered.** The make-up exam will be scheduled for March 6th at 2:30 PM. If a student is unable to write both the midterm and make-up exam with Academic Consideration, their final exam will be re-weighted to make up for the missed exam. Students who missed an exam without Academic Consideration will receive a zero on the exam.

Please refer to the Policy of Academic Accommodations and Academic Considerations attached to this syllabus.

8.2 Course Policy on AI (e.g., Chat GPT)

Within this course AI tools such as Chat GPT are permitted exclusively for information-gathering and preliminary research purposes. If AI tools are used, students must acknowledge use and state how the tool was used. **Unauthorized use of AI constitutes an academic offense and will be subject to academic discipline.**

Here is how to acknowledge use of AI in APA format: <https://apastyle.apa.org/blog/how-to-cite-chatgpt>

Students can use AI tools to:

- Clarify questions they have about course content (e.g., you can ask chat GPT about a course concept to help with your understanding) but be aware that the response may be inaccurate or inconsistent with the course content. Asking your lecture or lab instructor will be more useful.

Students should not:

- Have AI tools write any part of your assignments/papers/capstone, either by copying and pasting or by paraphrasing the output.
- Have AI tools answer any questions from the lab assignments, research project worksheets, or lab capstone.
- Have AI tools generate your research question or study design for your research project. This course policy is consistent with current policy for Canadian researchers; using AI to generate some, or all, of your research grant (or other research product) constitutes a breach of research integrity (plagiarism and invalid authorship) under the Canadian tri-agency policy.

Students should note that information provided by AI tools such as Chat GPT can include mistakes, inaccuracies, biases, and out-dated information. Whenever these tools are used, students should cross-verify the information provided to them. This includes: 1) verifying that the sources used by AI exist and have been accurately summarized, 2) consulting multiple original and reputable up-to-date sources to verify information, and 3) being cautious of bias that could be present in the information provided.

8.3 Notice of Turnitin Analysis

Work submitted in this course will 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>). Please note that Turnitin analysis now includes AI detection.

9. Academic Integrity, Online Behavior, and Intellectual Property Statement

- 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 Web site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf (See also Appendix A below)

- Within this course AI tools such as Chat GPT are permitted exclusively for information-gathering and preliminary research purposes. If AI tools are used, students must acknowledge use and state how the tool was used. Unauthorized use of AI will be subject to academic discipline.
- Students can use AI tools to: Clarify questions they have about course content (e.g., you can ask chat GPT about a course concept to help with your understanding) but be aware that the response may be inaccurate or inconsistent with the course content. Asking your instructor will likely be more useful.
- Students should not: Have AI tools generate ideas for your final project or write any part of your assignments/papers, either by copying and pasting or by paraphrasing the output.
- All students are expected to engage online in a professional and respectful manner. This includes all interactions with peers, as well as communication between TAs or your Professor. Failure to do so will result in academic discipline.
- Recording of lectures or tutorials without the explicit consent of the Professor or TA is grounds for academic discipline.
- Course content created by a faculty member is considered the faculty member's intellectual property; it should not be distributed, shared in any public domain, or sold by a student or other third party without prior written consent of the faculty member.
- All assessment or examinations done online or in-person are expected to be done by the student registered in this course.

Department of Psychology Policies Related to AI Tools

1. Policy on the Use of Generative AI Tools

The Department of Psychology expects that students will submit work that is truly their own, completed without external assistance (human or artificial).

The use of generative AI tools (such as ChatGPT) is not permitted for any submitted coursework unless express permission has been granted by your instructor.

Students **should not have AI tools write any part of their assignments or papers, either by copying and pasting or by paraphrasing the output.** Unauthorized use of AI constitutes an academic offence and will be subject to academic discipline.

Additional information: Students can use AI tools to clarify questions they have about course content (e.g., you can ask ChatGPT about a course concept to help with your understanding), but students should be aware that the response may be inaccurate or inconsistent with the course content. Asking your instructor is a more effective strategy. Students should note that information provided by AI tools such as ChatGPT can include mistakes, inaccuracies, biases, and outdated information. Whenever these tools are used, students should cross-verify the information provided to them. This means verifying that the sources used by AI exist and have been accurately summarized, consulting multiple original and reputable up-to-date sources to verify information, and being cautious of bias that could be present in the information provided.

2. Policy on Use of Translation Tools*

The Department of Psychology views the unapproved use of translation or language applications as an academic offence.

Any usage of translation applications or language generation by students to complete specific assigned work for this course **must be approved** by the instructor **prior** to submitting the work **and noted by the student in the submitted work** itself.

Writing text and then feeding it into a computer application to improve or translate your own words, changing a few words, and then submitting this text as if it was your own **constitutes plagiarism**. You must compose text, choose words, construct logic flow, structure sentences and paragraphs to organize, synthesize, interpret information with your own mind. When you borrow language or ideas from another person or from a machine this must be acknowledged with quotation marks and/or citations.

Why do we have this policy?

- Translation is intellectual work and produces intellectual property, thus any text which is translated must cite the translator.
- Psychology endeavors to advance students' linguistic, analytic, and reasoning competencies – this can not happen outside of specific language competencies.
- Earning a university degree signals that an individual has advanced literacy and communicative skill in the language of instruction at the university; this is English at King's University College at Western University. If translation machines are used by students without regulation, we will have no way of certifying whether these competencies exist and fewer mechanism for encouraging students to do the hard work to develop them.

** Based on the policy developed by the Department of Child and Youth Studies*

KING'S UNIVERSITY COLLEGE

GENERAL COURSE POLICIES

2025-2026

1. Academic Accommodations, Consideration for Absences

Academic Accommodation (Accessibility)

Accessibility Services works to ensure that academic programs are accessible to all students, and supports students who may have a condition related to, but not limited to, vision, hearing, mobility, different ways of learning, mental health, chronic illnesses, chronic pain, autism spectrum disorder, ADD/ADHD, and temporary conditions (beyond short-term academic consideration). Accessibility Services provides recommendations for accommodation based on medical documentation or psychological and cognitive assessment. The accommodation policy can be found here [Academic Accommodation for Students with Disabilities](#). Information on Accessibility Services at King's can be found [here](#).

Academic Consideration for Student Absence

If a student is unable to meet a course requirement due to substantial but temporary extenuating circumstances (medical or compassionate), they should follow the procedures below.

In some cases, where instructors have built flexibility into their assessments, this flexibility will already address consideration needs.

Requests for academic consideration should be directed to the Academic Advising Office of your faculty/college of registration. Requests must be made as soon as possible and no later than 48 hours after the missed assessment.

As a rule, documentation is required for academic consideration. For academic consideration requests on medical grounds, the Student Medical Certificate is available at https://www.kings.uwo.ca/kings/assets/File/currentStudents/courses_enrollment/exams_and_tests/SMC-Feb-2025.pdf.

Students are permitted one academic consideration request without supporting documentation per term per course.

Instructors may designate one assessment per half-course weight as requiring formal supporting documentation. Please refer to the course outline for each course.

For further information, please see:

https://uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf

Please note, Friday Make-Up Exams may only be written with the instructor's consent.

Absences from Final Examinations

If you miss the Final Exam, contact the Academic Advising Office of your faculty/college of registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (e.g., more than 2 exams in 23-hour period, or more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under [Special Examinations](#)).

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give notice in writing to the instructor and Academic Advising Office if a course requirement will be affected by a religious holiday/observance. Notice must be given as early as possible, and no later than two weeks prior to an examination, and one week prior to a midterm test date. It is the responsibility of such students to inform themselves concerning the work done in classes from which they are absent and to take appropriate action.

2. Support Services

Accessibility, Counselling and Student Development at King's University College:

<https://www.kings.uwo.ca/current-students/student-services/>

Students experiencing emotional or mental health distress can access services at King's University College:

<http://www.kings.uwo.ca/current-students/campus-services/student-support-services/personal-counselling/>

Good2talk is a good online and phone 24/7 resource for students and is available in English, Mandarin, and French: <https://good2talk.ca>, 1-866-925-5454

MentalHealth@Western provides a complete list of options about how to obtain help:

https://www.uwo.ca/health/mental_wellbeing/

Academic Support Services at King's University College:

<https://www.kings.uwo.ca/current-students/academic-resources/>

GBSV Support:

King's is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at: <https://www.kings.uwo.ca/about-kings/safe-campus/gender-and-sexual-violence/>

You can reach someone supports at Kings by emailing Care@kings.uwo.ca or calling 519-930-4640 to reach a social worker who can offer help.

You can also reach Western's Gender-Based Violence & Survivor Support Case Manager by [email](#) or by calling 519-661-3568.

Further supports can be found on this website: <https://www.kings.uwo.ca/about-kings/safe-campus/gender-and-sexual-violence/>

See also https://www.uwo.ca/health/student_support/survivor_support/get-help.html

University Students' Council offers many valuable support services for students, including the health insurance plan: <http://westernusc.ca/services/>

3. Statement on Use of Electronic Devices

Use of Electronic Devices: Unless explicitly stated otherwise, you are not allowed to have a cell phone, or any other electronic device, with you during tests or examinations. Unauthorized possession of such a device during a test or examination constitutes an academic offence.

Use of Laptops, Tablets, and Smartphones in the Classroom: King's University College at Western University acknowledges the integration of new technologies and learning methods into the curriculum. The use of electronic devices such as laptop computers, tablets, or smartphones can contribute to student engagement and effective learning. At the same time, King's recognizes that instructors and students share jointly the responsibility to establish and maintain a respectful classroom environment conducive to learning.

The use of electronic devices by students during lectures, seminars, labs, etc., shall be for matters related to the course at hand only. Students found to be using electronic devices for purposes not directly related to the class may be subject to sanctions under the Student Code of Conduct; see <https://www.kings.uwo.ca/current-students/student-affairs/code-of-student-conduct1/>

Inappropriate use of electronics (e.g., laptops, tablets, smartphones) during lectures, seminars, labs, etc., creates a significant disruption. As a consequence, instructors may choose to limit the use of electronic devices in these settings. In addition, in order to provide a safe classroom environment, students attending in-person class sessions are strongly advised to operate laptops with batteries rather than power cords.

4. Statement on Academic Offences

King's is committed to academic integrity. Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, is posted at http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

It is expected that students will submit work that is truly their own, completed without external assistance (human or artificial) except as explicitly permitted by the course instructor. Check with your instructor on what tools, including generative AI (ChatGPT, translation tools, grammar-checking tools) are permitted in the course. Because a tool is permitted in one course, that does not mean it is permitted in other courses.

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; see <https://elearningtoolkit.uwo.ca/tools/Originality Reports - TurnItIn.html>.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

5. Copyright of Course Material

Lectures and course materials, including PowerPoint presentations, tests, outlines, and similar materials are protected by copyright. Faculty members are the exclusive owner of copyright in those materials they create. Students may take notes and make copies for their own use. Students may not allow others to reproduce or distribute lecture notes and course materials publicly (whether or not a fee is charged) without the express written consent of a faculty member. Unauthorized sharing of class content is subject to academic discipline.

Similarly, students own copyright in their own original papers and exam essays. If a faculty member wishes to post a student's answers or papers on the course website, they should ask for the student's written

permission.

6. Use of Recordings

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation and/or the participant has the prior written permission of the instructor. Unauthorized recording and/or sharing of class content is subject to academic discipline.

7. Policy on Attendance

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.