### PSYO 270-002: Introduction to Research Methods and Design

2024W Term 1 (September–December 2024) In-person, WF 12:30–1:50pm, ART 366 Pre-requisites: (PSYO 111 and 121) or (PSYO 100, 101, and 102)

Instructor: Rebecca Godard (she/her)

Email: rebecca.godard@ubc.ca



Welcome to PSYO 270! I am looking forward to being your instructor this term. I am a PhD candidate at UBCO, and my research/teaching interests include social media use, technology and social relationships, and research methods and statistics. I am passionate about supporting undergraduate students as they explore their interests in psychology and beyond.

**Teaching assistant:** Jason Scott (he/him)

#### Office hours (Zoom):

Rebecca: Mondays 1–2pm or by appointment (Zoom only) Jason: Wednesdays 3:30–4:30pm (ASC 281 or Zoom)

https://ubc.zoom.us/j/64373808680?pwd=0QqB9GGp6fbK01aT2AhYygbnJhEEuY.1

Meeting ID: 643 7380 8680

Passcode: 211655

Office hours are an opportunity to talk one-on-one about topics covered in class, assignment requirements, grading, or anything else related to the course. I am also happy to discuss aspects of your academic experience beyond this course, including research opportunities, the honours program, and graduate programs. You do not need to make an appointment—simply access the Zoom link during scheduled office hours. If this time doesn't work for your schedule, please send me an email with several times you could meet.

**Communication:** In addition to office hours, I am available by Canvas message or by email (<a href="rebecca.godard@ubc.ca">rebecca.godard@ubc.ca</a>). I aim to respond to messages/emails within 24 hours of receiving them, excluding weekends and holidays. If you have questions about an upcoming assignment or exam, please ensure you send your message/email at least 24 hours in advance of the deadline, excluding weekends and holidays.

**Textbook:** The textbook for this course can be accessed **for free online** at <a href="https://opentextbc.ca/researchmethods/">https://opentextbc.ca/researchmethods/</a>.

**Land acknowledgement:** The UBCO campus, where this course takes place, is located on the traditional, ancestral, and unceded territory of the Syilx Okanagan Nation. If you would like to learn more about this land, you can do so at <a href="https://www.native-land.ca">www.native-land.ca</a>.

**Equity, diversity, and inclusion:** I strive to facilitate a safe and inclusive class environment for all students, particularly those from groups that face historical and

continued marginalization within psychology and broader society (e.g., Black, Indigenous, and students of colour; disabled and/or neurodivergent students; low-income and first-generation students; etc.). If you have any concerns regarding accessibility, equity, diversity, inclusion, or related issues, please don't hesitate to contact me or to describe these issues in the anonymous course feedback form (to be distributed mid-semester).

**Course description:** In this course, you will learn to ask and answer questions in psychology by getting hands-on experience designing a research project with a team. Classes will rotate between giving you the background knowledge needed to understand, critically evaluate, and perform successful research in psychological science and allowing you to apply those skills to the development, analysis, and presentation of a research project.

**Detailed Course Description and Objectives:** This course is designed to introduce you to the philosophy of science and inquiry in psychology. We will accomplish this by combining lectures with collaborative work that has an applied focus. You will complete replication studies illustrating key research designs, learn and practice concepts from lectures and course readings, and ultimately conduct your own research project. After completing this course, you will be able to:

- Understand research methods and design in psychological science, including the concepts of research ethics, validity and reliability, measurement, single and multiple- variable research techniques, survey design, and data analysis and interpretation.
- Write a summary of a research project in APA format.
- Propose a research idea that is feasible and testable.
- Develop a research study by choosing the appropriate research design to test specific hypotheses, complying with ethical guidelines, and managing research materials and data.
- Interpret research findings.
- Present research findings in a professional conference-style showcase.
- Critically evaluate research and everyday claims made about research.

**Assessments:** To assess whether you have met these learning outcomes, you will complete the following assessments. Further details will be provided about all assessments during the term.

#### 1. Assignments (20%):

a. Group project assignments (3% each, total 15%): In your research project groups, you will complete five brief assignments (Labs 1–5). These assignments are designed to be completed in class, and they build towards your poster presentation at the end of the term. Credit will only be granted to team members who are present and contribute to the assignments. (Lab 6 involves creating and submitting your poster. You will receive marks for this as part of your overall grade on your research project; see below.) Assignments are formative assessments that are designed to give you low-stakes opportunities to demonstrate learning

- and receive detailed feedback. If you would like clarification on any feedback received or for me to look at any revisions you make after reading my feedback, you can resubmit them by email to <a href="mailto:rebecca.godard@ubc.ca">rebecca.godard@ubc.ca</a> or bring them to my office hours. Resubmitted assignments will not be regraded, but resubmission can help your group make improvements to your project that will help you achieve a better final research project grade.
- b. *Individual assignments (3%):* As part of your term-long research projects, you will complete two individual assignments: 1) completing the Tri-Council Course on Research Ethics (1%), and 2) participating in other groups' research projects (2%). Further details about these assignments will be provided during the term.
- c. **SONA research participation (2%):** You will have the option of participating in research studies at UBCO through SONA or of completing an alternate assignment (writing a summary of a research article). You only need to complete **one** of these options (you cannot receive extra credit for completing both). Please see below for further details.
- 2. Research project (20%): You will make a professional academic conference poster presentation of your results (see Daily Schedule). Your team will present your poster during one of the final classes of the term. In addition to presenting, you will get the chance to learn about the projects conducted by other research teams in class. You will have the option to attend an additional poster session (beyond the session you present in) to earn extra credit on the final exam. All team members are evaluated on their individual contribution to the final team poster. This means that although the poster represents the efforts of the entire team, you will be assessed and marked on your individual presentation of the team's findings and on your individual contribution to the team's poster. Your overall mark will reflect the quality of both your poster and your research project.

# 3. Exams (60%):

a. *Midterm* exams (15% each, total 30%): There will be two closed-book midterm exams (15% each). Exams will include multiple-choice and short-answer questions covering class and textbook content. Reading the textbook will be helpful in achieving a good grade on the tests in addition to regular class attendance. Exams will take place on Canvas using Lockdown Browser. Please ensure you complete the test quiz before Exam 1 to work out any technical difficulties. Paper copies of exams will be available for students who do not have a device compatible with Lockdown Browser, or for anyone experiencing technical difficulties during the exam. The dates and coverage of these exams are indicated on the daily schedule below—exams take place during your regular class time in the regular classroom (ART 366). You must be physically in the classroom (or in the DRC) to take the exam. Anyone who accesses the exam outside these authorized locations will receive a score of 0. Please bring your student or government-issued photo ID to all exams.

b. Final Exam (30%): The final exam will take place during the finals period at the time and place specified in the university final exam schedule. The final exam will have the same format as the midterms. Content from the last third of the course (see the daily schedule below) will be weighted more heavily in the final exam (approximately 50% of questions) compared to content from the first two-thirds of the course. Please note that all decisions about rescheduling final exams (e.g., due to illness or personal emergencies) are made by the Dean. Requests must be made using this form: <a href="https://fass.cms.ok.ubc.ca/wp-content/uploads/sites/131/2020/06/Out-of-time-examination-FASS.pdf">https://fass.cms.ok.ubc.ca/wp-content/uploads/sites/131/2020/06/Out-of-time-examination-FASS.pdf</a>

Grading UBC Grading Scale

Assignments: 20% 90-100 = A+85-89 = AResearch project: 20% Exam 1: 15% 80-84 = A-Exam 2: 15% 76-79 = B+Final exam: 30% 72-75 = B68-71 = B-64-67 = C+60-63 = C55-59 = C-50-54 = D0-49 = F

Out of fairness to all students, requests for additional extra credit or to "round grades up" (i.e., to a higher letter grade, to achieve a passing grade) will not be considered.

# **Course Schedule**

I recommend that you complete the readings **before** the corresponding lecture. Readings are available for free at <a href="https://opentextbc.ca/researchmethods/">https://opentextbc.ca/researchmethods/</a>. All assignments are due at 11:59pm. Lectures are highlighted in green, group work sessions in yellow, and assessments in blue.

Date	Topic	Assignment due
W Sep 4	Welcome + Chapter 1	
F Sep 6	Chapters 1 + 2	
W Sep 11	Chapter 2	
F Sep 13	Chapter 3	Optional: Teamwork survey due Sept 15
W Sep 18	Chapter 5	
F Sep 20	Lab 1	Lab 1: due Sep 22
W Sep 25	Exam 1	
F Sep 27	Chapter 6	CORE ethics: due Sept 27
W Oct 2	Chapter 6	
F Oct 4	Lab 2	Lab 2: due Oct 6
W Oct 9	Chapter 9	
F Oct 11	Chapter 12	
W Oct 16	Chapter 12	
F Oct 18	Lab 3	
W Oct 23	Chapter 13	
F Oct 25	Chapter 13	Lab 3: Due Oct 27
W Oct 30	Exam 2	
F Nov 1	Lab 4	
W Nov 6	Chapter 4	
F Nov 8	Chapter 11	Lab 4: Due Nov 10
W Nov 20	Chapter 7	Data collection: due Nov 17
		*SONA alternate assignment: Due Nov 17
F Nov 22	Lab 5	Lab 5: Due Nov 24
W Nov 27	Chapter 8	
F Nov 29	Lab 6	Lab 6: Due Dec 1
W Dec 4	Poster session 1	
F Dec 6	Poster session 2	*SONA: Due Dec 6 (no late submissions)
		Poster peer evaluations: Due Dec 8
TBD	Final exam	

<sup>\*</sup>Note: You only need to complete either SONA or the SONA alternate assignment.

#### **Course Policies**

- Attendance: Attendance during all class sessions is strongly recommended. Attendance during group work sessions (highlighted in yellow in the schedule above) is required to receive credit for assignments. If you are unable to attend due to illness or other reasons, please make an effort to contribute to your group by joining by video call (ask your instructor for help with this if needed) or completing part of the assignment on your own. If this is not feasible, please notify me within 48 hours. A maximum of two absences during group work will be excused.
- Lecture slides and recordings: Lecture slides will be posted in advance of each class. Lectures will be audio recorded, and recordings will be posted within 24 hours. Lecture recordings are audio-only and are not intended to be a substitute for class attendance. Lecture recordings are to be used only for your own personal studying and may not be shared with anyone outside the course or retained beyond the end of the term. Failure to comply with these policies may be considered unauthorized use of resources.
- Late work: Assignments (i.e., everything other than exams and your poster presentation) may be submitted up to 24 hours late with no penalty. This is a "grace period" designed to accommodate minor issues such as minor physical or mental health concerns, transportation problems, caregiving responsibilities, workload from other courses, etc. You do not need to notify me to use the grace period, and there is no limit on the number of times you can use the grace period. Work that is submitted beyond the grace period will receive a 25% deduction for each 24-hour period (or part thereof) late. If you are experiencing more substantial problems that impede your ability to submit work on time (e.g., major physical or mental illness, major illness or death of a family member or close friend, etc.) please let me know, and I may provide additional extensions on a case-by-case basis.
- Missed exams/presentations: For Exam 1, Exam 2, and your poster presentation, if you are unable to complete the assessment during the scheduled time due to illness or a personal emergency, please contact me within 48 hours of the schedule assessment period, and I will schedule a make-up exam/presentation session as soon as possible. Documentation of the illness or emergency may be required. Students who miss an exam/presentation and do not contact the instructor within 48 hours will receive a score of 0. Exceptions will be considered only in exceptional circumstances. For the final exam, all requests for rescheduling must be made to Dean using this form: <a href="https://fass.cms.ok.ubc.ca/wp-content/uploads/sites/131/2020/06/Out-of-time-examination-FASS.pdf">https://fass.cms.ok.ubc.ca/wp-content/uploads/sites/131/2020/06/Out-of-time-examination-FASS.pdf</a>
- Academic integrity: Academic integrity is "a commitment to upholding the values of respect, integrity, and accountability in academic work" (<a href="https://academicintegrity.ubc.ca/about-academic-integrity/">https://academicintegrity.ubc.ca/about-academic-integrity/</a>). Maintaining

academic integrity is critical to achieving the learning outcomes in this course, creating a fair environment for learning for all students, and ensuring your future academic success. Academic misconduct includes, but is not limited to (definitions adapted from <a href="https://academicintegrity.ubc.ca/regulation-process/academic-misconduct/">https://academicintegrity.ubc.ca/regulation-process/academic-misconduct/</a>):

- o Falsification: Providing false or incomplete information;
- Cheating: Using unauthorized resources to gain an academic advantage;
- o *Plagiarism:* Submitting someone else's work as your own;
- Patchwriting: Making minor changes to someone else's work and presenting it as your own;
- Impersonation and contract cheating: Having someone else complete your work on your behalf, or vice versa.

If you would like more information about academic misconduct, you can find additional resources at <a href="https://academicintegrity.ubc.ca/modules/">https://academicintegrity.ubc.ca/modules/</a>. Any instances of suspected academic misconduct will be investigated and may be reported to the Dean. For further details on this process, as well as supports and resources for students, please see <a href="https://academicintegrity.ubc.ca/regulation-process/students/">https://academicintegrity.ubc.ca/regulation-process/students/</a>.

• Use of generative artificial intelligence tools: If you use ChatGPT (or a similar tool) to get ideas and/or partial answers for an assignment and/or to generate any text for a draft or final version of any part of an assignment, you must declare that you have used it. You must also include any generated text from this tool in your submission (i.e., a screenshot or copy-and-paste of ALL output generated when working on the assignment). If you use this tool, your (or your group's) original contributions will be evaluated. Failure to fully declare the use of this tool will be considered "unauthorized".

#### SONA RESEARCH ACTIVITY

Students earn Sona credit points for their eligible courses from participating in research activity. This can be either through direct participation in research through the Sona online research system (Option 1), by completing summaries of primary research articles (Option 2), or by a combination of the two types of activities. First year courses (i.e., PSYO 111 and PSYO 121) include 4% as part of the final course grade for participating in Sona research activity, while second year and higher courses allow for a 2% bonus to be added to the final course grade for participating.

#### Research Participation In Online Research System (Option 1)

As a participant in one of the numerous research studies posted at <a href="http://ubco.sona-systems.com/">http://ubco.sona-systems.com/</a>, you will obtain 0.5% credit for each 0.5 hour of participation. Hence, studies requiring a 1-hour time commitment provides a credit of 1%, 1.5 hours provides a credit of 1.5%, and 2 hours provides a credit of 2.0%, etc.

### Important Requirements

You may participate in more than one study in order to earn credits. It is important to sign up for studies early in the semester in order to increase the odds that a timeslot is available. If you wait until later in the semester, timeslots may no longer be available.

## Logging On To The System

Sona is only open for those students who are registered in a psychology course offering Sona credit points. Please only use the request account option if you have never used the Sona system before. If you have used the Sona system before, please use the most recent login information you remember to log in.

#### Missed Appointments & Penalties

Missed appointments (i.e., failure to cancel the appointment at least 3 hours prior to the session) will be tracked. The consequence will be that you will not receive credit for participation in the study <u>and</u> you will be assigned an unexcused no-show. The unexcused no-show designation will cause you to <u>lose</u> the credit value of the study from the total possible credit points you can earn for your course. For example, if you are in PSYO 111 (or 121), you can earn up to 4.0 credits. If you miss an hour-long session that you signed up for (i.e., 1.0 credit) <u>and</u> don't cancel it in advance, the maximum credits that you can now earn for your course is 3.0, <u>regardless</u> of how many studies you complete.

If, after consenting to participate and starting a session (or survey), you decide to withdraw your consent, to avoid receiving an unexcused no-show on Sona, you must do one of the following:

- if it is an online study, you must cancel your Sona sign-up and/or contact Shirley (<a href="mailto:psyc.ubco.research@ubc.ca">psyc.ubco.research@ubc.ca</a>) if you are unable to cancel your sign-up;
- if it is an in-person study, you <u>must</u> let the researcher know directly. Their email can be found on the main description page for the study (little envelope icon).

Depending upon the study, they will either cancel your session or assign you an excused no-show (meaning that you will not be penalized).

Your ability to withdraw your data will depend upon the study. Instructions for withdrawing your data (including limitations) will be described in the study's consent form.

Please email <u>psyc.ubco.research@ubc.ca</u> with any questions or concerns that you may have regarding the Sona system. Your professor or instructor does NOT have access to this information.

# Research Summary Assignment (Option 2)

As an alternative to participating in research studies, you may obtain Sona credit points by completing library-writing projects to a satisfactory level. Each library-writing project is worth a total of two credits.

### Important Requirements

- 1. This project consists of reading and summarizing (in written form) a recent, peer-reviewed, primary research article.
  - A "recent" article has been published within the past 12 months.
  - A "peer reviewed" article is one that has been reviewed by other scholars before it is accepted for example, it *cannot* be a news item, an article from a popular magazine, a notice, or a letter to the editor.
  - A "primary" research article describes an experiment or study where data are collected by the authors. In other words, the article you choose to review *cannot* be a book review, literature review, or summary article.
- 2. You must choose an article published by one of the following agencies:
  - The American Psychological Society Psychological Science, Current Directions in Psychological Science, Psychological Science in the Public Interest, or Perspectives on Psychological Science.
  - The American Psychological Association <a href="www.apa.org/journals/by\_title.html">www.apa.org/journals/by\_title.html</a> has a full listing.
  - The Canadian Psychological Association Canadian Psychology, Canadian Journal of Behavioural Science, or Canadian Journal of Experimental Psychology.
  - The Psychonomic Society Behavior Research Methods, Cognitive, Affective, & Behavioral Neuroscience, Learning & Behavior, Memory & Cognition, Perception & Psychophysics, or Psychonomic Bulletin & Review.

#### 3. Other Assignment Guidelines

The summary should be about 300-500 words in length. The source must be cited and referenced in accordance with the *Publication Manual of the American Psychological Association*. The review will be graded on a pass – fail basis (2% or 0%). By **Sunday, November 17**, submit the following to the course instructor:

• the article summary

- a copy of the article
- a cover page that specifies your name, student number, email address, and word count of the summary.
- the course title and number

Submitting the assignment 14 days in advance is necessary to ensure that you have an opportunity to make corrections, if required. If you do not check your email frequently, provide a phone number on the cover page.

### **University Policies and Resources**

**Grading Practices:** Faculties, departments, and schools reserve the right to scale grades in order to maintain equity among sections and conformity to University, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department, or school. Grades are not official until they appear on a student's academic record. http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,41,90,1014 It is the policy in this course that final grades cannot be adjusted (through extra assignments or otherwise) in order to achieve a passing mark, higher letter grade etc. In order to maintain fairness within this course, requests for additional assignments or to round up grades will not be considered.

Academic Integrity: The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating usually result in a failing grade or mark of zero on the assignment or in the

**course.** Careful records are kept to monitor and prevent recidivism. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at: http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,54,111,0

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**UBC Okanagan Disability Resource Centre:** The Disability Resource Centre ensures educational equity for students with disabilities and chronic medical conditions. If you are disabled, have an injury or illness and require academic accommodations to meet the course objectives, please contact Earllene Roberts, the Diversity Advisor for the

Disability Resource Centre located in the University Centre building (UNC 214).

**UNC 214** 250.807.9263

Email: earllene.roberts@ubc.ca Web: <u>www.students.ok.ubc.ca/drc</u>

**UBC Okanagan Equity and Inclusion Office:** UBC Okanagan is a place where every student, staff and faculty member should be able to study and work in an environment that is free from discrimination and harassment. UBC prohibits discrimination and harassment on the basis of the following grounds: age, ancestry, colour, family status, marital status, physical or mental disability, place of origin, political belief, race, religion, sex, sexual orientation or unrelated criminal conviction. If you require assistance related to an issue of equity, discrimination or harassment, or to get involved in human rights work on campus, please contact the Equity and Inclusion Office.

**UNC 216** 250.807.9291

Email: equity.ubco@ubc.ca Web: www.equity.ok.ubc.ca

Health & Wellness: At UBC Okanagan health services to students are provided by Health and Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Health and Wellness for more information or to book an appointment.

**UNC 337** 250.807.9270

email: healthwellness.okanagan@ubc.ca

Web: <u>www.students.ok.ubc.ca/health-wellness</u>

**Student Learning Hub:** The Student Learning Hub (LIB 237) is your go-to resource for free math, science, writing, and language learning support. The Hub welcomes undergraduate students from all disciplines and year levels to access a range of supports that include tutoring in math, sciences, languages, and writing, as well as help with study skills and learning strategies. For more information, please visit the Hub's website (https://students.ok.ubc.ca/student-learning-hub/) or call 250-807-9185.

Office of the Ombudsperson for Students: The Office of the Ombudsperson for Students offers independent, impartial, and confidential support to students in navigating UBC policies, processes, and resources, as well as guidance in resolving concerns related to fairness.

Email: ombuds.office@ubc.ca
Web: www.ombudsoffice.ubc.ca

**SAFEWALK:** Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call 250.807.8076 For more information, see: <a href="https://www.security.ok.ubc.ca">www.security.ok.ubc.ca</a>

**Sexual Violence Prevention and Response Office (SVPRO):** A safe and confidential place for UBC students, staff and faculty who have experienced sexual violence

regardless of when or where it took place. Just want to talk? We are here to listen and help you explore your options. We can help you find a safe place to stay, explain your reporting options (UBC or police), accompany you to the hospital, or support you with academic accommodations. You have the right to choose what happens next. We support your decision, whatever you decide.

Visit svpro.ok.ubc.ca or call us at 250.807.9640

Independent Investigations Office (IIO): If you or someone you know has experienced sexual assault or some other form of sexual misconduct by a UBC community member and you want the Independent Investigations Office (IIO) at UBC to investigate, please contact the IIO. Investigations are conducted in a trauma informed, confidential and respectful manner in accordance with the principles of procedural fairness. You can report your experience directly to the IIO via email: director.of.investigations@ubc.ca or by calling 604.827.2060 or online by visiting investigationsoffice.ubc.ca

**UBC EFRT:** The UBC Emergency First Response Team (EFRT) is a group of volunteer student responders who shift 24/7 to provide emergency medical first-aid services at the UBC Okanagan campus. The organization is run alongside security and supports the campus community on a day-to-day basis as well as at various campus activities and events. Our responders can be on scene within minutes and can be called through Campus Security's emergency line at 250-807-8111 in case of any emergency. To learn more about who we are, how we recruit new responders, and stay up to date, follow us on Instagram or Facebook @ubcefrt. Need medical support at your event? Check out our website at https://efrt.ok.ubc.ca/, or email us any further questions at ubcefrt@gmail.com

**Indigenous Programs & Services**: Indigenous Programs & Services provides community and culturally appropriate services and support to First Nation, Métis, and Inuit Students. The <u>Indigenous Centre</u> (UNC 210) is open Monday to Friday from 8:30 am to 4:30 pm. Programs and services are provided through a mix of virtual and inperson opportunities.