

Course Outline – Psychology 2856 (530/531)

Research Methods in Psychology II

School of Behavioural and Social Sciences

In the event of a COVID-19 resurgence during the course that necessitates the course moving away from in-person delivery, course content may be delivered online either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). There may also be changes to any remaining assessments at the discretion of the course instructor. In the event of a COVID-19 resurgence, detailed information about the impact on this course will be communicated by the Office of the Provost and by the course instructor.

General Information

Course #: Psy 2856G
Section #: 530/531
Term: *Winter*
Year: 2022-23
Delivery: *in-person*
Course Day and Time: *Tuesday 2:30-4:30*
 Thursday 8:30-10:30
Course Location: BR- 304

Instructor Information

Name: Dr. Caroline Strang
E-mail: cstrang@uwo.ca
Office hours: By appointment
Office location: UH 337

Course Description

Building on students' knowledge of design and ethical issues in psychological research, this course will introduce more complex designs and data analysis. Students will design and conduct an original research project and communicate the findings in an APA-style written report.

Antirequisite(s): Psychology 2800E, Psychology 2820E, [Psychology 2830A/B](#), [Psychology 2840F/G](#).

Prerequisite(s): At least 60% in [Psychology 2855F/G](#).

Extra Information: 2 lecture hours, 2 laboratory hours.

Required Course Materials

Introduction to Behavioral Research Methods -- 7th ed. Author: Mark R. Leary
ISBN-13: 9780137541188

Optional Course Materials

The text can be purchased with REVEL access, which is a website made by the publisher (Pearson) that provides quizzes and some online activities. Students are welcome to purchase REVEL access if they would like to use these additional learning tools, but it is not required for the course.

Learning Outcomes

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

- critique published experimental work in psychology and formulate new research ideas
- design and conduct a research study in psychology
- demonstrate the ability to conduct research in an ethical manner
- recognize and compare within-subjects, between-subjects, and mixed factorial designs in psychology
- present a proposal for a research study
- communicate an entire research project in an APA-style written report

Brescia Competencies

By the end of this course, among other skills, students should be able to:

- Analyze different forms of publications on a given topic in psychology and communicate methodology and findings orally and in writing.
Competencies: Communication; Critical Thinking; Inquiry and Analysis.
- Critique published work in psychology and formulate new research ideas based on this work.
Competencies: Critical Thinking; Inquiry and Analysis; Valuing.
- Demonstrate knowledge of, and ability to apply, APA writing style.
Competencies: Communication; Critical Thinking; Inquiry and Analysis.
- Recognize and compare experimental and non-experimental designs in psychology and appropriately interpret the findings resulting from those designs.
Competencies: Communication; Critical Thinking.
- Demonstrate an understanding of (i) ethical issues arising regarding research with humans and with animals and (ii) how these issues are handled in a research setting.
Competencies: Critical Thinking; Inquiry and Analysis; Valuing.
- Generate a novel research question and develop testing methods to address that question.
Competencies: Problem Solving; Critical Thinking; Inquiry and Analysis; Valuing.

Teaching Methodology and Expectations of Students

This course builds on the skills and information presented in Psychology 2855: Research Methods I. Students will be exposed to more complicated experimental designs and data analysis. In particular, the skills gained will be foundational to written work and oral presentations required in upper-year psychology courses, especially the honours thesis course.

Lectures

Our class meetings will be a mixture of lecture and activities. Topics will follow the schedule given below, although lectures will also introduce material that is not in the textbook. You are responsible for all of the material from class meetings and the material in the text. Any exceptions will be announced in class. If you miss class, you should arrange to borrow notes from another student.

Labs

The lab is an important component of this course and is meant to give you hands-on experience with understanding research design and how it is implemented in psychology. You will gain experience working with primary research articles in psychology and communicating studies orally and in writing. You will also propose and conduct an original research study based on prior published work and complete ethics documents for the study.

Copyright and Intellectual Property

PowerPoint lecture slides and notes, lists of readings, in-class activities, assignment guidelines, and other components of the course materials are typically the intellectual property of the instructor. Unauthorized reproduction through audio-recording, video-recording, photographing, sharing on social media, or posting on course-sharing websites is an infringement of copyright and is prohibited. Such action may be considered a Code of Conduct violation and lead to sanctions.

Evaluation

Evaluation consists of two components: exams over class material and lab work. Each is worth 50% of the course final mark. **Students must pass both the class component and the lab component to receive a final passing mark in the course.**

Lecture component

Exams cover class material: There will be two non-cumulative tests in this course. Tests are based on lecture material and the course textbook. Tests are equally weighted, so each contributes 25% to the final course mark (2 exams x 25% = 50% for class component). Exams may include questions in several formats, including multiple choice, fill-in-the-blank, definitions, and short answer. All exams are closed book with no aids allowed. Without exception, students are required to take both exams in the course in order to earn a passing overall mark. Make-up exams require approval by an academic counselor. Make-ups may consist of any of the above question formats or essay questions.

Lab component

In the lab portion of the course, you will propose and conduct an original research study, usually with one or two other students (see Overview of Research Projects, below), as well as other activities. Performance in the lab component of the course will be assessed based on the research proposal presentation and ethics documents (12% total), the final lab report (35%) and participation in online experiments (3%). These requirements make up the lab portion (50%) of the final course mark.

Research proposal presentation (8%) & ethics documents (4%) = 12%

You and your research partners will create a PowerPoint presentation on your proposed study. All members of the research team will receive the same mark for the presentation. Participation in the presentation is required in order to receive a mark for the team's presentation. Therefore, if a student fails to attend the presentation without appropriate approval for accommodation, her presentation mark

will be 0. One set of ethics documents including a letter of information, informed consent form, and debriefing form will also be handed in by each group after the presentations have been completed. All group members will receive the same mark for the ethics document.

Final lab report (35%)

After gathering and analyzing data for your project, you will write a full APA-style research report. This report will be submitted via the course Owl page. While the proposal presentation, data collection, and data analysis are completed as a team, the final written lab report must be written individually.

Online experiment participation (3%)

You will participate in three **Online Psychology Laboratory** experiments (1% each) that will inform our lectures will constitute the participation mark. Your data is never linked to your identity.

- In order to have class members' data to include in the appropriate lecture, each experiment has a deadline on Tuesday at 5pm before the pertinent lecture the next week. **To earn credit for participating in an experiment (1% for each experiment for a maximum of 3%), you must complete the experiment before the deadline.** Experiments may be completed at any time before the deadline. Experiments may also be completed after the deadline, although no credit will be earned after the deadline. Since participation is time-sensitive, no make-ups will be offered.

Overview of research projects

Students, usually working in teams of two to four (depending on class size), will be asked to generate their own research topics and, once approved, will conduct an original study. Evaluation will be based on an in-class presentation, ethics materials, and a final written lab report. Each student must participate in her team's data collection process in order to access the final data for her written lab report. In short, **in order to use the data for your report, you need to help collect it.**

Research Topics

There are some topics that cannot be approved for student research projects. Students will **not** be allowed to investigate sensitive matters which are typically dealt with by professionals only, such as psychopathology, depression, suicide, criminality, or topics deemed to unduly focus on areas of personal sensitivity (e.g. sex lives, drug habits, liquor consumption, etc.). Some possible research topics include personality traits, attitudes, values, mood, memory processes, educational psychology, problem solving, humour, and the interrelationships between these variables.

Ethics

Before any research can be conducted, the research team **must** receive research ethics approval for its project.

- *Any individual conducting research without ethics approval will receive an immediate failing grade in the entire course (course grade of F, 40%).*

Research with human subjects is governed by university regulations and by provincial and federal laws that ensure the welfare of the subjects and the integrity of scientific research. Conducting

research without the appropriate ethics review and approval is a serious offence. Each student project is reviewed for ethics approval.

It is expected that students will conduct their research at Brescia and will request participation from students on Brescia property. Students are not allowed to solicit research participation off of Brescia University College property. It is expected that students will behave in an ethical and respectful manner. Participants cannot be coerced into participating in a study, nor harassed if they choose to not participate. It is important that student researchers abide by the statement in the letter of information, which clearly states that individuals may withdraw from the study at any time with no penalty.

It is expected that when dealing with the data that they collect, students will respect confidentiality and privacy. Laws and regulations governing scientific research require that research materials be kept after the conclusion of the study and presentation of the research data. Thus, **questionnaires and other data records, and all signed consent forms must be submitted to the instructor with the lab report at the completion of the course for proper storage and eventual destruction. Note that the final lab report will not be considered “handed in” (i.e., late penalties will apply) until all materials have been submitted.**

- *Failure to submit questionnaires and other research materials and signed consent forms will be considered a breach of ethics and will result in a failing grade (grade of F, 40%) for the course.*

Evaluation Breakdown:

Component	Weight	Date/Deadline	Brescia Competencies
Lecture: Midterm Exam	25%	Feb 23 rd In class	Critical Thinking, Inquiry & Analysis
Lecture: Final Exam	25%	TBA	Critical Thinking, Inquiry & Analysis
Lab: Research Proposal <i>(Components below are part of the proposal)</i>	47%		Critical Thinking, Inquiry & Analysis, Communication, Valuing, Problem Solving
Presentation	8%	Feb 7 th & Feb 14 th	
Ethics documents	4%	Feb 21 st	
Final Research Report	35%	Apr 6 th	
Lab: Online Psychology Labs (OLP)	3%	Jan 17 th , 24 th , 31 st	Inquiry & Analysis

Academic Accommodation

For course components worth 10% or more of the total course grade, please see the Academic Policies and Regulations section at the end of this course outline or consult the Academic Calendar.

For course components worth less than 10% of the total course grade, documentation is not required. Whenever possible students should provide notification in advance of due dates or absence. If advance notification is not possible, the course instructor should be contacted within two business days.

Course Content

The course will follow the schedule provided below. The material for later weeks builds on material from previous weeks, so material from early weeks in the course will frequently be revisited in later lectures/labs.

Weekly Organizer:

Class/Week	Date	Lecture	Textbook Readings	Date	Lab
1	Jan 12 th	Overview of Course		Jan 10 th	Course Introduction; Data input practice; register for OPL
2	Jan 18 th	Review of single IV designs, posthocs	Ch 10 (Section 10.1) Ch 12 (Section 12.5)	Jan 17 th	Research teams announced, research ideas discussed; complete OPL: Be a Juror
3	Jan 26 th	Within-sub designs	Ch 9 (Section 9.3)	Jan 24 th	Presenting your research proposal; complete OPL: Self Reference
4	Feb 2 nd	Between-sub factorial design 1 & Between-sub factorial design 2: simple main effects	Ch 10 (Sections 10.2 & 10.3)	Jan 31 st	Research project consultations/group meetings; complete OPL: Word Recognition
5	Feb 9 th	Between-sub factorial 3: posthocs & review; Mixed designs	Ch 10 (Sections 10.2 & 10.3)	Feb 7 th	Research proposal presentation day 1

6	Feb 16 th	Introductory level programming for cognitive testing		Feb 14 th	Research proposal presentation day 2
7	Feb 23 rd	Exam 1 (25%) during class; covers lecture and textbook material from weeks 1-6		Feb 21 st	How to write Introduction & Method sections; Ethics Docs Due
8	Mar 2 nd	Reading Week		Feb 28 th	Reading Week
9	Mar 9 th	Choosing a statistical test	Ch 12	Mar 7 th	Test review & How to write a Results section
10	Mar 16 th	Drawing conclusions, Meta-analysis	Ch 11; Ch 2 (Section 2.5.1)	Mar 14 th	How to write Abstract, Discussion sections
11	Mar 23 rd	Designs for Animal Research & Conducting research “in the field”		Mar 21 st	Analyzing data & Creating APA-style figures and tables; Project consultations with instructor
12	Mar 30 th	Lessons from the field: How to deal with unanticipated research challenges		Mar 28 th	Project consultations with instructor
13	Apr 6 th	Course debrief, brief summaries of project outcomes Lab Reports & research materials due		Apr 4 th	Project consultations with instructor
April Exam Period (April 13-30)		Exam 2 (25%; Lectures) covers lecture material and textbook from weeks 9-13			

2022-23 BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS

1. POLICY REGARDING ACADEMIC ACCOMMODATION

The complete policy regarding Accommodation for Illness - Undergraduate Students can be found at https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_135

Students who have long-term or chronic medical conditions which may impede their ability to complete academic responsibilities should seek Academic Accommodation through Student Accessibility Services (https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_10).

Personal commitments (e.g., vacation flight bookings, work schedule) which conflict with a scheduled test, exam or course requirement are **not** grounds for academic accommodation.

Students who experience an illness or extenuating circumstance sufficiently severe to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes:

1. For medical absences, submitting a **Student Medical Certificate (SMC)** signed by a licensed medical or mental health practitioner;
2. For non-medical absences, submitting **appropriate documentation** (e.g., obituary, police report, accident report, court order, etc.) to their Academic Advisor. Students are encouraged to contact their Academic Advisor to clarify what documentation is acceptable.

Request for Academic Consideration for a Medical Absence

When a student requests academic accommodation (e.g., extension of a deadline, a makeup exam) for work representing 10% or more of the student's overall grade in the course, it is the responsibility of the student to provide acceptable documentation to support a medical or compassionate claim. All such requests for academic accommodation **must** be made through an Academic Advisor and include supporting documentation.

Academic accommodation for illness will be granted only if the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete their academic responsibilities. Minor ailments typically treated by over-the-counter medications will not normally be accommodated.

The following conditions apply for students seeking academic accommodation on medical grounds:

1. Students must submit their Student Medical Certificate (SMC) along with a request for relief specifying the nature of the accommodation being requested no later than two business days after the date specified for resuming responsibilities. An SMC can be downloaded from https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf;
2. In cases where there might be an extended absence or serious issue, students should submit their documentation promptly and consult their Academic Advisor for advice during their recovery period;
3. Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, scheduled tests or examinations, and other academic requirements;
4. Students **must** communicate with their instructors **no later than 24 hours** after the end of the period covered by the SMC to clarify how they will fulfil the academic expectations they may have missed during the absence;
5. Appropriate academic accommodation will be determined by the Dean's Office/Academic Advisor in consultation with the course instructor(s). Academic accommodation may include extension of deadlines, waiver of attendance requirements, arranging Special Exams (make-ups), re-weighting

course requirements, or granting late withdrawal without academic penalty.

2. ACADEMIC CONCERNS

If you feel that you have a medical or personal challenge that is interfering with your work, contact your instructor and Academic Advisor as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis. Retroactive requests for academic accommodation on medical or compassionate grounds are not normally considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult your Academic Advisor (https://brescia.uwo.ca/enrolment_services/academic_advising/book_an_appointment.php). If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines; please contact your Academic Advisor or see the list of sessional dates in the Academic Calendar (<https://www.westerncalendar.uwo.ca/SessionalDates.cfm?SelectedCalendar=Live&ArchiveID=>).

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 eligibility and/or Entrance Scholarship eligibility.*

3. ABSENCES

Short Absences: If you miss a class due to a minor illness or other problems, check your course outline for information regarding attendance requirements and make sure you are not missing a test or assignment. Cover any readings and arrange to borrow notes from a classmate. Contact the course instructor if you have any questions.

Please note that for asynchronous online courses, attendance or participation requirements maybe different than for synchronous or in-person courses.

Extended Absences: If you have an extended absence, you should contact the course instructor and an Academic Advisor. Your course instructor and Academic Advisor can discuss ways for you to catch up on missed work, and arrange academic accommodations if appropriate and warranted.

It is important to note that the Academic Dean may refuse permission to write the final examination in a course if the student has failed to maintain satisfactory academic standing throughout the year or for too frequent absence from the class or laboratory (https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#Page_64).

4. SCHOLASTIC 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: https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20.

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. Note that such offences include plagiarism, cheating on an examination, submitting false or fraudulent assignments or credentials, impersonating a candidate, or submitting for credit in any course without the knowledge and approval of the instructor to whom it is submitted, any

academic work for which credit has previously been obtained or is being sought in another course in the University or elsewhere. Students are advised to consult the section on Scholastic Discipline for Undergraduate Students in the Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Academic Dean's Office, or the Registrar. A claim that "you didn't know it was wrong" is not accepted as an excuse.

The penalties for a student guilty of a scholastic offence (including plagiarism) include refusal of a passing grade in the assignment, refusal of a passing grade in the course, suspension from the University, and expulsion from the University.

Plagiarism:

Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence.

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.

Computer-marked Tests/exams:

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. Software currently in use to score computer-marked multiple-choice tests and exams performs a similarity review as part of standard exam analysis.

5. PROCEDURES FOR APPEALING ACADEMIC EVALUATIONS

All appeals of a grade must be directed first to the course instructor. If the student is not satisfied with the decision of the course instructor, a written appeal is to be sent to the School Chair. If the response of the Chair is considered unsatisfactory to the student, they may then submit a written appeal to the Office of the Dean. If the student is not satisfied with the decision of the Dean, they may appeal to the Senate Review Board Academic (SRBA), if there are sufficient grounds for the appeal and if the matter falls within the jurisdiction of the SRBA. For information on academic appeals consult your Academic Advisor or see the Student Academic Appeals – Undergraduate in the Academic Calendar

https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14.

Note that final course marks are not official until the Academic Dean has reviewed and signed the final grade report for the course. If course marks deviate from acceptable and appropriate standards, the Academic Dean may require grades to be adjusted to align them with accepted grading practices.

6. PREREQUISITES

Unless you have either the prerequisites for a course or written Special Permission from the Dean to enroll in it, you will be removed from the 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 prerequisite(s).

7. SUPPORT

Support Services

The Brescia University College Registrar's website, with a link to Academic Advisors, is at <http://brescia.uwo.ca/academics/registrar-services/>. Students can access supports through Brescia's Student Life Centre (<http://brescia.uwo.ca/life/student-life/>) and Learning Development & Success at Western (<https://www.uwo.ca/sdc/learning/>).

Mental Health and Wellness

Students may experience a range of issues that can cause barriers to your learning, such as increased anxiety, feeling overwhelmed, feeling down or lost, difficulty concentrating and/or lack of motivation. Services are available to assist you with addressing these and other concerns you may be experiencing. You can obtain information about how to obtain help for yourself or others through **Health & Wellness at Brescia**, https://brescia.uwo.ca/student_life/health_and_wellness/index.php and **Health and Wellness at Western**, http://uwo.ca/health/mental_wellbeing/index.html.

Sexual Violence

All members of the Brescia University College community have a right to work and study in an environment that is free from any form of sexual violence. Brescia University College recognizes that the prevention of, and response to, Sexual Violence is of particular importance in the university environment. Sexual Violence is strictly prohibited and unacceptable and will not be tolerated. Brescia is committed to preventing Sexual Violence and creating a safe space for anyone in the Brescia community who has experienced Sexual Violence.

If you or someone you know has experienced any form of Sexual Violence, you may access resources at https://brescia.uwo.ca/safe_campus/sexual_violence/index.php.

Portions of this document were taken from the Academic Calendar, the Handbook of Academic and Scholarship Policy, and the Academic Handbook of Senate Regulations. This document is a summary of relevant regulations and does not supersede the academic policies and regulations of the Senate of the University of Western Ontario.
