

**Research Methods in Psychology II
Psychology 2856G
Winter 2017**

Class Meetings

Lecture + Lab: Mondays, 8:30 – 12:30 pm, BR - 135

Course Instructor

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Office Hours: By appointment and we can always talk before/after class

Required Materials

Myers, A., & Hansen, C. (2012). *Experimental Psychology (7th edition)*. Belmont, CA: Wadsworth.

note: this is the same text used for Psy 2855 Research Methods 1

Recommended Materials

American Psychological Association (2010). *Publication manual of the American Psychological Association (6th ed.)*. Washington, DC: Author.

Course Website

Registered students will see the course listed on their Owl page.

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.

Prerequisite(s): At least 60% in Psychology 2855F/G

Antirequisite(s): Psychology 2800E

Course Learning Objectives

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

Course Format

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.

The lecture and lab components of the course will occur in adjacent time slots; we will take a break between them.

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 Myers and Hansen 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.

Evaluation

The final course mark consists of two components: lecture/text material (50%) and lab work (50%). **Students must pass both the lecture component and the lab component to receive an overall passing mark in the course.**

Evaluation summary:

| | | |
|--------------------------------------|---|-------------------|
| Online quizzes = 5% | } | Lecture component |
| Test = 15% | | |
| Final Exam = 30% | | |
| Presentation = 8% | } | Lab component |
| Ethics = 4% | | |
| Lab Report = 35% | | |
| Online experiment participation = 3% | | |

Lecture material: There will be an online quiz (accessible through OWL) available following each lecture that must be completed. The quizzes will become available at 12:30pm on Mondays and remain open until 11:59pm on Sundays. Students are required to complete all quizzes with the lowest quiz grade excluded from calculation of the overall grade (5%). There will be one test and one cumulative exam in this course based on lecture material and the course textbook (Myers & Hansen, 2012). The test will be in class and will be worth 15% of the final mark. The cumulative final exam will be 2 hours and will be worth 30% of the total course mark. Thus, the test (15%) plus the exam (35%) make up the lecture portion (50%) of the final

course mark. The test and exam may include questions in several formats, including multiple choice, fill-in-the-blank, definitions, short answer, and essay. Without exception, students are required to take both the test and the exam in order to receive a passing overall mark in the course. Make-ups require approval by an academic counselor. Make-ups may consist of any of the above question formats.

Lab evaluation: 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 both in hard copy and to turnitin 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 Thursday 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.

Late policy

Due dates in this course will be strictly enforced. Work to be turned in (both hard copies and electronic copies submitted to the OWL dropbox) is due at the start of the class meeting (no later than 25 minutes after the start of class, or 8:55 am). Items that are submitted after such time will be considered late and subject to a 5% mark deduction. A 5% mark reduction will be enforced for each subsequent day work is late. For example, for a Tuesday due date:

- Work submitted after 8:55 am on Tuesday or later that day: -5%
- Work submitted Wednesday: -10%
- Work submitted Thursday: -15%
- Work submitted Friday: -20%
- Work submitted Monday: -25% (weekends count as 1 day)

All work submitted after the lab or class meeting has ended should be taken to the receptionist in the Brescia registrar's office [location subject to change, an announcement will be made in class]. You should request both a time/date stamp from the receptionist and that she place the work in the instructor's mailbox. Assignments may also be handed in early to the registrar (follow the same time/date stamp procedure).

Accommodation for late work or missed exams will only be provided with the approval of an academic advisor. There are no exceptions to this rule. It is the student's responsibility to contact an academic advisor before, on, or very soon after (within days) a due date for which accommodation is being requested.

SCHEDULE – *subject to change*, see Owl and announcements in class for updates

| Date | Lecture Topic | Text | Lab Topic |
|--------|--|------|---|
| Jan 9 | Overview of course | -- | Data input practice; register for OPL (opl.apa.org; class ID = 8423); complete OPL: <i>Be a Juror</i> (due Thursday Jan 12 by 5pm); outside class complete tri-council ethics tutorial (follow link on Owl) |
| Jan 16 | Review of single IV designs, posthocs | | Research teams announced, research ideas discussed; complete OPL: <i>Self Reference</i> due Thursday Jan 19 by 5pm |
| Jan 23 | Within-sub designs | 11 | Presenting your research proposal |
| Jan 30 | Between-sub factorial design 1 & Between-sub factorial design 2: simple main effects | 10 | Research project consultations/group meetings |

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|-------------------|---|----|--|
| Feb 6 | Between-sub factorial 3: posthocs & review; Mixed designs | 10 | Research proposal presentation day 1 ; complete OPL: <i>Word Recognition</i> due Feb 9 by 5pm |
| Feb 13 | Introductory level programming for cognitive testing | -- | Research proposal presentation day 2 |
| Feb 20 | <i>Reading week</i> | | <i>Reading week</i> |
| Feb 27 | Test: chapters 10, 11 + lectures | -- | Ethics Docs Due ; How to write Introduction & Method sections |
| Mar 6 | Choosing a statistical test | 14 | Test review & How to write a Results section |
| Mar 13 | Drawing conclusions, Meta-analysis | 15 | How to write Abstract, Discussion sections |
| Mar 20 | Designs for Animal Research & Conducting research "in the field" | -- | Analyzing data in SPSS & Creating APA-style figures and tables |
| Mar 27 | Lessons from the field: How to deal with unanticipated research challenges | -- | Project consultations with instructor |
| Apr 3 | Lab Reports & research materials due ; course debrief, brief summaries of project outcomes | | No lab |
| April exam period | Final exam | | |

2016-17 BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS

1. POLICY REGARDING MAKEUP EXAMS AND EXTENSIONS OF DEADLINES

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 her academic responsibilities. Minor ailments typically treated by over-the-counter medications will not normally be accommodated. Documentation shall be submitted as soon as possible to the student's Academic Advisor indicating the period of illness and when the student should be able to resume academic responsibilities. Students must submit their documentation 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. Appropriate academic accommodation will be determined by the Dean's Office in consultation with the student's instructor(s). Please note that 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.

A UWO Student Medical Certificate (SMC) is **required** if a student is seeking academic accommodation on medical grounds. This documentation should be obtained at the time of the initial consultation with the physician/nurse practitioner or walk-in clinic. A SMC can be downloaded from: <http://www.westerncalendar.uwo.ca/2016/pg117.html> The student must request documentation sufficient to demonstrate that her ability to meet academic responsibilities was seriously affected. Please note that under University Senate regulations documentation stating simply that the student "was seen for a medical reason" or "was ill" is **not** adequate to support a request for academic accommodation.

Whenever possible, requests for academic accommodation should be initiated in advance of due dates, examination dates, etc. Students must follow up with their professors and Academic Advisor in a timely manner.

The full policy on requesting accommodation due to illness can be viewed at:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf

2. ACADEMIC CONCERNS

If you feel that you have a medical or personal problem 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 may not be considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult an Academic Advisor. If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines (refer to the Registrar's website, www.registrar.uwo.ca, for official dates). 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.*

The 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 (<http://www.westerncalendar.uwo.ca/2016/pg130.html>)

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.

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.

4. POLICY ON CHEATING & ACADEMIC MISCONDUCT

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.westerncalendar.uwo.ca/2016/pg113.html>

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. Students are urged to read the section on Scholastic Offences in the Academic Calendar. 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 Academic Misconduct in the Western Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Student Services Centre, 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 (see Scholastic Offence Policy in the Western Academic Calendar).

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 signed by the student must be sent to the Department Chair. If the response of the department is considered unsatisfactory to the student, she may then submit a signed, written appeal to the Office of the Dean. Only after receiving a final decision from the Dean may a student appeal to the Senate Review Board Academic. A Guide to Appeals is available from the Ombudsperson's Office, or you can consult an Academic Advisor. Students are advised to consult the section on Student Academic Appeals under Academic Rights and Responsibilities in the Western Academic Calendar (<http://www.westerncalendar.uwo.ca/2016/pg112.html>)

6. PREREQUISITES AND ANTIREQUISITES

Unless you have either the prerequisites for a course or written special permission from your 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).

Similarly, you will also be deleted from a class list if you have previously taken an antirequisite course unless this has the approval of the Dean. These decisions may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course because you have taken an antirequisite course.

7. SUPPORT SERVICES

The Brescia University College Registrar's website, with a link to Academic Advisors, is at <http://brescia.uwo.ca/academics/registrar-services/>. The website for the Student Development Centre at Western is at <http://www.sdc.uwo.ca/>. Students who are in emotional/mental distress should refer to Mental Health @ Western http://uwo.ca/health/mental_wellbeing/ for information including a complete list of options about how to obtain help.

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.