

PS295 INTRODUCTION TO RESEARCH METHODS - FALL 2017**PREREQUISITES:**

PS101 and PS102; and registration status: Honours Psychology programs.

EXCLUSIONS:

HE201, PS248, PS291, PS298.

LECTURES:

Section A: Monday, Wednesday, Friday, 10:30-11:20, BA101

Section B: Monday, Wednesday, Friday, 11:30-12:20, BA101

INSTRUCTOR:

Dr. Roger Buehler

Office: N2074J

Office Hours: Monday & Wednesday 1:00-2:00 (or by appointment)

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Email: rbuehler@wlu.ca

Webpage: <https://www.wlu.ca/faculty-profiles/science/roger-buehler.html>

LAB COORDINATOR:

Doreen Weise

Office: N2062

Office Hours: By appointment

Phone: 519-884-0710 ext. 2991

Email: dweise@wlu.ca

TEACHING ASSISTANTS:

There is a team of 14 teaching assistants in the course, one for each lab section. You will meet your TA during the first lab session, and complete contact information will be provided.

TEXTBOOK:

Leary, M. R. *Introduction to behavioral research methods* (7th edition on REVEL). It is available from the bookstore as a digital text (\$95) or digital text/looseleaf bundle (\$110), making it less expensive than previous hardcover editions.

To access the REVEL text, purchase a code from the bookstore and follow the link address (unique to this course) below:

1. Go to: <https://console.pearson.com/enrollment/qfxsb5>
2. Sign in with an existing Pearson Account or create a Pearson Account if this is your first Pearson digital product.
3. Click 'View access options' to redeem your access code purchased from the bookstore (or buy instant access).

Depending on your preference, there are different ways to access the text material on REVEL. You can simply locate the assigned material through the Table of Contents. Alternatively, the material is organized into weekly reading "assignments", along with optional interactive quizzes. There are no grades allotted to these reading assignments, but the assignment structure and "deadlines" might help you to keep on track with the reading.

CLICKERS:

An i-clicker remote is required for in-class participation and voting, and marks will be allotted for i-clicker participation (see section on grades below). You can purchase a remote at the bookstore. The i-clicker2 version is preferred because it allows you to answer numeric questions as well as multiple choice questions. There may be some numeric questions. However, given that some students may already own the original i-clicker, we will base participation grades only on responses to multiple choice questions. Thus you may use either the i-clicker2 or the original i-clicker for this course.

COURSE WEBSITE - MYLEARNINGSPEACE:

Course information will be posted regularly on MyLearningSpace (myLS). The lecture outlines (power point) will be posted weekly. Outlines for a week of lectures will normally be posted by the Monday morning of that week, so you can print or download them for further note-taking during class.

COURSE DESCRIPTION:

This course is an introduction to the scientific basis for conducting research in psychology. It deals with fundamentals of the logic of science, research design, and interpretation. We will cover issues in the development and conduct of scientific research, along with the logic and implementation of several research designs used in psychology. Specific topics covered in the text and lectures include: forming testable hypotheses, strengths and weaknesses of various approaches to research, control of extraneous influences, measurement of effects, and drawing conclusions from empirical evidence.

The weekly labs and assignments provide “hands on” experience with several of the major steps involved in conducting psychological research, including: generating hypotheses, performing literature searches, measuring variables, considering ethical issues, interpreting results, and writing in APA format.

The knowledge and skills developed in this course are essential for psychology students, whether or not they intend to pursue a research-related career. The course serves as a foundation for senior psychology courses because it provides a basis for the critical evaluation and conduct of research. In addition, an understanding of research methods enables people to evaluate research findings they encounter in everyday life (e.g., findings reported in the news media). Thus the course should help students to become not only competent researchers, but also thoughtful consumers of research.

COURSE REQUIREMENTS:**Summary:**

20% Midterm exam

40% Final exam

30% Lab Assignments (4 assignments, each worth 7.5%)

10% Participation in Labs and Lectures (5% labs, 5% lectures)

2% Bonus: Research Participation

20% Midterm exam:

The midterm exam will be held in the **Theatre Auditorium** on Wednesday November 1 during class time. It will be 50 minutes long and is worth 20% of the course grade. It will cover material from Weeks 1 through 8, including lectures, labs, and the assigned textbook chapters. It will consist of multiple choice and short answer questions.

There is no *make-up* or *deferred* midterm exam. Failure to write the midterm at the scheduled time will result in a grade of zero, unless a *documented* and acceptable reason is provided. If you miss the midterm for a documented and acceptable reason, the value of the midterm will be added to the value of the final exam. Participation in extracurricular events (sports, drama, student politics, etc.) is NOT an acceptable reason for failing to write the midterm as scheduled.

40% Final exam:

The final exam is scheduled by the Registrar’s Office during the final exam period (December 9-22) and the date and time will be posted near the middle of the term. The final exam will be 2.5 hours in length and will be similar in format to the midterm exam. It will be cumulative, covering the entire course, but with emphasis given to the material after the midterm. The exam will cover material from the lectures, the labs, and the assigned textbook chapters.

30% Assignments:

There will be four written assignments. The purpose is to expose you to some major steps involved in designing and carrying out research. The assignments will give you practice with: generating hypotheses, performing an electronic literature search, manipulating and measuring variables, identifying potential problems with research designs, considering the ethics of research, interpreting results, and writing in APA format. The schedule of assignments is as follows:

<i>Assignment</i>	<i>Topic</i>	<i>Due date</i>
1	Hypotheses; Literature Search	Thursday October 5
2	Sampling; Research Ethics	Thursday October 26
3	Interpreting Effects; APA Format	Tuesday November 21
4	Understanding Factorial Designs	Tuesday December 5

All assignments must be submitted as Word documents using the myLS dropbox before 11:59 pm on the due date. After this time, you will not be able to submit your assignment via myLS and must email your late assignment directly to your TA.

Assignments will be accepted after the deadline only with a documented and acceptable reason. Acceptable reasons for late assignments do NOT include requirements in other courses, computer problems, printer problems, extracurricular activities, or other problems that could reasonably be resolved by the student. Assignments submitted late without an acceptable reason will be graded, but will be penalized initially by 20% and by an additional 10% for each day past the due date.

These are individual, not group, assignments, and you are expected to carry out all work yourself. The work you submit MUST be your own. Copying of any material on assignments is cheating and will result in a grade of zero on that assignment. A second occurrence of copying will result in automatic failure in the course.

We will do everything we can to return assignments promptly (i.e., within a week) via myLS. Grading of assignments is completed by your lab TA. Questions regarding the grading of assignments should be directed first to your TA; any remaining questions or concerns should then be directed to the lab coordinator, Doreen Weise, who oversees assignment grading.

10% Participation in Labs and Lectures:

Labs: There are 10 labs scheduled this term. The labs will be conducted by graduate student TAs, who will lead exercises, discussions, and demonstrations. Many lab activities pertain directly to the assignments. The main objective of the labs is to provide students with practice and experience with some of the major steps involved in conducting research. Some labs will introduce material that was not covered in class, whereas other labs will provide an opportunity to review and build on class material. Material covered in labs may be included on exams. The labs are mandatory and 5% of the course grade will be based on attendance and participation. Attendance means showing up on time and staying until the lab is over; participation includes the completion of a brief online quiz at the end of each lab.

Lectures: We will be making use of clickers in order to make the lectures more interactive, to help keep students engaged, and to check comprehension of course concepts. During many lectures, students will be asked to respond to questions using the clicker. We will monitor whether students respond (not whether they are correct!) and 5% of the course grade will be based on clicker response levels. Further instructions for purchasing and using the clickers are provided in a separate “clicker instruction page”.

It is understood that students may sometimes need to miss a lab or lecture for legitimate reasons (e.g., illness, emergency, family obligations, etc.). Thus students will not be penalized for missing a reasonable number of labs and lectures – they will get full marks for lecture participation as long as their clicker response rate is above 80%, and part marks for lower levels of participation. Given this allowance for absence, in most cases we do NOT wish to know students’ explanations for why they missed labs or lectures, and will NOT consider such explanations as a basis for adjusting grades. However, if there are exceptional circumstances that result in a lengthy absence, you should discuss this with your instructor.

2% Bonus Research Participation:

An excellent way to learn about how research is conducted is to participate in research studies; therefore, students can earn up to 2% bonus on their final grade by participating in studies being conducted in the WLU psychology department. Sign up for studies using the on-line PREP (Psychology Research Experience Program) system that is also used in PS101 and PS102.

For studies completed in person, students receive 1 research credit for each hour of participation, up to a maximum of 2 credits (i.e., .5 research credits for ≤ 30 min, 1 research credit for 31-60 min, 1.5 research credits for 61-90 min, etc.). For on-line studies, students receive .5 research credits for each hour of participation. An alternative way to earn the same amount of research credits is to complete critical reviews of journal articles (1 research credit for each review, to a maximum of 2). For further information see the “PREP start-up guide” posted on myLS and also on the WLU psychology department website.

LECTURE AND READING SCHEDULE:

WEEK	LECTURE TOPICS	CHAPTER
1. Sep 7-8	Introduction to course	
2. Sep 11-15	The scientific approach; Hypotheses	1 16.1, 16.8
3. Sep 18-22	Variables; Operational definition	3 9.2
4. Sep 25-29	Measurement	4
5. Oct 2-6	Research ethics; Sampling participants	15 5
6. Oct 9-13	READING WEEK	
7. Oct 16-20	Types of research; Descriptive research	1.10 6
8. Oct 23-27	Correlational research	7 8.1
9. Oct 30-Nov 3	MIDTERM EXAM: Weds November 1 [no lecture that day] Experimental and quasi-experimental research	9.1, 9.2
10. Nov 6-10	Interpreting effects: confounds, internal validity	9.5, 9.6, 9.8 13 16
11. Nov 13-17	Interpreting effects: variance, hypothesis testing	9.4, 9.7 2 11
12. Nov 20-24	Experimental design: between and within subjects designs	9.3 10.1
13. Nov 27-Dec 1	Experimental design: factorial designs	10.2, 10.3, 10.4
14. Dec 4-8	Factorial designs continued; Course review	

LAB SCHEDULE:

WEEK	TOPICS AND EXERCISES
1. Sep 7-8	NO LAB – First Week (2 Days) of Term
2. Sep 11-15	Introduction to psychological research
3. Sep 18-22	Hypotheses and operational definitions
4. Sep 25-29	Electronic literature search
5. Oct 2-6	Measurement: Observational measures
6. Oct 9-13	NO LAB – READING WEEK
7. Oct 16-20	Research ethics; Sampling
8. Oct 23-27	Descriptive statistics and correlation
9. Oct 30-Nov 3	NO LAB – MIDTERM WEEK
10. Nov 6-10	Writing in APA format
11. Nov 13-17	Experimental research; Random assignment
12. Nov 20-24	Research design: between and within subjects designs
13. Nov 27-Dec 1	Research design: factorial designs
14. Dec 4-8	NO LAB – Last Week of Term

IMPORTANT INFORMATION FOR ALL STUDENTS: UNIVERSITY AND COURSE POLICIES

1. **Accessible Learning Office:** Students with disabilities or special needs are advised to contact Laurier's [Accessible Learning Centre](#) for information regarding its services and resources. Students are encouraged to review the [Academic Calendar](#) for information regarding all services available on campus.
2. **Plagiarism:** Wilfrid Laurier University uses software that can check for plagiarism. If requested to do so by the instructor, students are required to submit their written work in electronic form and have it checked for plagiarism.
3. **Academic Integrity:** Laurier is committed to a culture of integrity within and beyond the classroom. This culture values trustworthiness (i.e., honesty, integrity, reliability), fairness, caring, respect, responsibility and citizenship. Together, we have a shared responsibility to uphold this culture in our academic and nonacademic behaviour. The University has a defined policy with respect to academic misconduct. As a Laurier student you are responsible for familiarizing yourself with this policy and the accompanying penalty guidelines, some of which may appear on your transcript if there is a finding of misconduct. The relevant policy can be found at Laurier's [academic integrity](#) website along with resources to educate and support you in upholding a culture of integrity. Ignorance is not a defense.
4. **Classroom Use of Electronic Devices:** Mobile devices are permitted in this course provided they are not taking away from the instruction of the course and the learning of other students (e.g., noise level, disturbing/distracting content). Audio and/or video recordings of classroom activities or materials are not permitted without prior approval. Both you (the student) and the instructor are responsible for administering this policy. Students who do not feel comfortable approaching another student may email or talk to me (your professor) in person. Students who fail to comply with this policy will receive a verbal and written warning first before being asked to leave the classroom.
5. **Course Add/Drop Dates 2017/2018:** Please refer to the Undergraduate Academic Calendar - [Academic Dates 2017-2018](#). For details of all important academic dates.
6. **Final Examinations:** The Academic Date section of the Calendar ([Academic Dates 2017-2018](#)) clearly states the examination date period for each semester. **Students must note that they are required to reserve this time in their personal calendars for the examinations. The examination period for the Fall Term: December 9 – 22.** Students who are considering registering to write MCAT, LSAT or GMAT or a similar examination, should select a time for those examinations that occurs outside the University examination period. For additional information that describes the special circumstances for examination deferment, consult the [University calendar](#).
7. **Laurier Email Account:** Students are expected to regularly check their Laurier email account for important notices from the university community. Students are also expected to send emails to official members of the university community from their Laurier email account in order to ensure delivery. Emails sent from non-Laurier accounts, such as Hotmail, may be identified as spam and not be delivered. Your co-operation is appreciated.
8. **Centre for Student Success:** The [Centre for Student Success](#) supports and enhances your academic experiences at Laurier. These services include academic advising and assistance with learning, mathematics, study skills, and writing development. Most of these services are delivered in small groups and individual consultation settings and are designed to encourage the sharing of ideas and peer learning.

WATERLOO RESOURCES

- [Foot Patrol](#) is a volunteer operated safe-walk program, available Fall and Winter daily from 6:30 pm to 3 am. Teams of two are assigned to escort students to and from campus by foot or by van. All teams are equipped with two-way radio, flashlight and first aid kit. All Foot Patrol volunteers are certified with emergency first aid training for efficient safety service across the Laurier campus. 519 886 3668 (FOOT)

- [Waterloo Student Wellness Centre](#) – is the home of all [physical, emotional and mental health services](#) for students on our Waterloo campus. We are a multidisciplinary team offering comprehensive, collaborative service to help you get the best support in the most seamless and coordinated manner possible. Located on the 2nd floor of the Student Services Building, booked and same-day appointments are available Mondays and Wednesdays from 8:30 am to 7:30 pm, and Tuesdays, Thursdays and Fridays from 8:30 am to 4:15 pm. 519-884-0710, x3146 wellness@wlu.ca or @LaurierWellness. **All students** have access to these services through their [OHIP and extended health plans](#). We welcome and support diverse communities. You will be asked to swipe your **health card** every time you visit us.

After hours crisis support is available:

[Here 24/7](#) Crisis Line. Call anytime to access Addictions, Mental Health & Crisis Services Waterloo – Wellington 1.844.437.3247

[Good2Talk](#) is a post-secondary school helpline. Call 1.866.925.5454 or through 2.1.1. Available 24/7/365

- The [Food Bank](#) provides food deliveries on a 24/7 basis confidentially supporting the dietary and nutritional needs of Laurier students. All dietary restrictions can be accommodated, and food packages typically last up to a week or more. All Laurier students are eligible to use this service to ensure they're eating healthy when overwhelmed, stressed or financially strained.