Faculty of Health Department of Psychology

PSYC 2030 3.0 N: INTRODUCTION TO RESEARCH METHODS

Thursdays, 2:30PM – 5:30PM, Curtis Lecture Hall E (CLH-E) Winter 2019/2020

Instructor and T.A. Information

Instructor: Dr. Matthew Pachai [he/him]

Office: Sherman Health Science Research Centre Room 1004 (SHR 1004)

Office Hours: By appointment Email: pachaim@yorku.ca

T.A.	Natalie Ferreira [she/her]	Lina Musa [she/her]
Role	Content TA	Grading TA
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Office	BSB 013	LAS 0003D
Office Hours	By appointment	By appointment

In addition to appointment-based office hours, the instructors and/or TAs may hold scheduled office hours prior to important deadlines (tests, assignments), which will be announced in class and on Moodle.

Course Prerequisite(s): Course prerequisites are strictly enforced

• HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.

Course Credit Exclusions

Please refer to York Courses Website for a listing of any course credit exclusions.

Course website: Moodle

Course Description

This course introduces students to the basics of research in psychology, equipping them with the tools to conduct research in upper-level courses and to think scientifically in their every day lives. We will cover the main forms of research in psychology, including experimental designs, quasi-experimental designs, surveys, and case studies. The strengths, weakness, and ethical considerations of each approach will be discussed, and throughout the course, students will be encouraged to think critically about how best to operationalize problems, apply appropriate methods, and evaluate outcomes. Furthermore, students will have an opportunity to practice locating empirical reports, comprehending their design, critically evaluating their results, and imagining the design of follow-up studies.

Program Learning Outcomes

Upon completion of this course, students should be able to:

- 1. Distinguish between experimental and non-experimental designs.
- 2. Demonstrate critical thinking in identifying strenghths and weaknesses of different research designs
- 3. Define hypotheses, independent and dependent variables, validity and reliability.
- 4. Demonstrates an ability to locate and identify valid, credible, and rigorous psychological research.
- 5. Identify the problems that arise during sampling, measurement, and making inferences from data
- 6. Understanding ethical obligations of researchers.

Specific Learning Objectives

- 1. Basics of the scientific method
- 2. Finding scientific articles
- **3.** Understanding the methods in a scientific article
- 4. Samples and populations
- **5.** Measurement (reliability, validity, measurement error)
- **6.** Basics of descriptive & inferential statistics
- **7.** Case studies
- 8. Observational studies (naturalistic & participant)
- 9. Correlational survey studies
- **10.** Qualitative studies
- **11.** Basics of experimental & quasi-experimental designs
- **12.** Experimental control (threats to internal and external validity)
- **13.** Research ethics and questionable research practices

Required Text

C. James Goodwin and Kerri A. Goodwin (2017). Research in Psychology: Methods and Design (8th edition). Wiley.

Available at the bookstore, on Amazon, and as an e-book for rental or purchase.

Study Guide and Online Resources

http://bcs.wiley.com/he-bcs/Books?action=index&itemId=1119316316&bcsId=10505

Course Requirements and Assessment:

Assessment	Date of Evaluation	Weighting
Test 1	January 30	25%
Test 2	March 5	35%
Test 3	April 2	20%
Assignment 1	February 13	10%
Assignment 2	March 19	10%
Total		100%

Description of Assessments

Tests: There will be 3 semi-cumulative multiple-choice tests. Students are responsible for all textbook chapters assigned prior to the test and for all material presented in lectures. Most of what is covered in class will be based on the textbook, but may go above and beyond that content. Lecture notes will be posted, but may not be comprehensive. For these reasons, students are encouraged to attend class, and if unable, to independently attain any pertinent material.

Assignments: Across two assignments, students will have an opportunity to put into practice the critical thinking skills discussed in class, and to gain experience finding and evaluating research claims made in peer-reviewed journals and other online sources. Further instructions will be discussed in class and posted on Moodle.

Grading as per Senate Policy

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+=9, A=8, B+=7, C+=5, etc.). Assignments and tests* will bear either a letter grade designation or a corresponding number grade (e.g. A+=90 to 100, A=80 to 89, B+=75 to 79, etc.)

For a full description of York grading system see the York University Undergraduate Calendar - <u>Grading Scheme for 2019-20</u>

Missed Tests

Students who miss a test due to illness or compassionate reasons must e-mail the instructor and TAs within 48 hours, and follow the Faculty of Health guidelines for missed tests. In the case of medical circumstances, students must include an Attending Physician's Statement or statement by a psychologist or counselor. The nature of the illness need not be disclosed, but the document must specify (1) the date of consultation, (2) contact information for the health provider, and (3) a statement that the student would not have been able to write a test at the designated time. For any other types of emergencies, appropriate official documentation must also be provided. This documentation should be placed in the instructor's mailbox (main floor of BSB) and/or sent as a PDF/JPG via e-mail. Failure to provide appropriate documentation for a missed test will result in a grade of 0.

If the missed test is prior to the drop date, regardless of reason, the student waives the right to have a specific percentage of graded feedback available to them prior to the drop date.

With appropriate documentation, the student may be asked to write a makeup test at a designated time. The number of times available will be limited, so if the student is unable to complete a make-up test, other course components will be re-weighted. Make-up tests may differ from the original.

Late Assignments:

All assignments must be submitted by 5:30PM on the due date. If an assignment is submitted less than 24 hours after the deadline, there will be a 25% penalty. If the assignment is submitted between 24 and 72 hours after the deadline, there will be a 50% penalty. Assignments will not be accepted more than 72 hours after the deadline. Late assignments must be emailed directly to the instructor.

Further Information Regarding Missed Tests/Late Assignments:

For any missed tests, midterm exam or late assignments, students MUST complete the following online form which will be received and reviewed in the Psychology undergraduate office.

HH PSYC: Missed Tests/Exams Form. Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the missed tests, midterm exam or late assignments. In addition, to the online form, students documented reason for a missed tests, midterm exam or late assignments such as illness, compassionate grounds, etc., MUST submit official documentation (e.g. Attending Physician Statement)

Add/Drop Deadlines

For a list of all important dates please refer to: Fall/Winter 2019-20 - Important Dates

	FALL (F)	YEAR (Y)	WINTER (W)
Last date to add a course without permission of	Sept. 17	Sept. 17	Jan. 19
instructor (also see Financial Deadlines)			
Last date to add a course with permission of	Oct. 1	Oct. 22	Feb. 3
instructor (also see Financial Deadlines)			
Drop deadline: Last date to drop a course	Nov. 8	Feb. 3	March 13
without receiving a grade (also see Financial			
Deadlines)			
Course Withdrawal Period (withdraw from a	Nov. 9 -	Feb. 4 -	March 14 -
course and receive a grade of "W" on transcript -	Dec. 3	Apr. 5	Apr. 5
see note below)			

^{*}Note: You may withdraw from a course using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as "W". The withdrawal will not affect your grade point average or count towards the credits required for your degree.

Electronic Device Policy

Laptops and other mobile devices are permitted in the classroom, but students are asked to be respectful of their peers. If you must use your phone during a lecture, please leave the classroom to do so. If you expect to use your laptop during class, consider sitting near the back so as to not disrupt students around you.

Academic Integrity for Students

York University takes academic integrity very seriously; please familiarize yourself with <u>Information</u> about the Senate Policy on Academic Honesty.

It is recommended that you review Academic Integrity information <u>SPARK Academic Integrity modules</u>. These modules explain principles of academic honesty.

Test Banks

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as "Cheating in an attempt to gain an improper advantage in an academic evaluation" (article 2.1.1 from the Senate Policy) and/or "encouraging, enabling or causing others" (article 2.1.10 from the Senate Policy) to cheat.

Electronic Devices During a Test/Examination

Electronic mobile devices of any kind are not allowed during a test or examination. Students are required to turn off and secure any electronic mobile device in their bag which is to be placed under the chair while a test/exam is in progress. Any student observed with an electronic device during a test/exam may be reported to the Undergraduate Office for a potential breach of Academic Honesty.

Academic Accommodation for Students with Disabilities

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The York University Accessibility Hub is your online stop for accessibility on campus. The Accessibility Hub provides tools, assistance and resources. Policy Statement.

Policy: York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

For Further Information please refer to: <u>York university academic accommodation for students with disabilities policy</u>.

Course Materials Copyright Information

These course materials are designed for use as part of the PSYC 2030 course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. <u>Intellectual Property Rights Statement</u>.

Course Schedule

Note that the following schedule is subject to change at the instructor's discretion. Any changes will be announced in class and on Moodle, and this document will be updated to reflect any differences.

Document updated January 17, 2020

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Date	Topic(s)	Reading
January 9	Course Introduction	Chapter 1
	Scientific Thinking in Psychology	
January 16	Developing Ideas for Research	Chapter 3
	Sampling and Measurement	Chapter 4 (up to p. 109)
January 23	Statistical Analysis	Chapter 4 (p. 110 to end)
	Introduction to Experimental Research	Chapter 5
January 30	Test 1	
February 6	Methodological Control in Experimental	Chapter 6
	Research	
February 13	Experimental Design: Single-Factor	Chapter 7
	Designs, Factorial Designs	Chapter 8
February 20	Reading Week	
February 27	Ethics in Psychological Research	Chapter 2
March 5	Test 2	
March 12	Non-Experimental Designs I: Survey	Chapter 9
	Methods	
March 19	Non-Experimental Designs II:	Chapter 10
	Observational and Archival Methods	
March 26	Quasi-Experimental Designs: Applied	Chapter 11
	Research, Small N Designs	Chapter 12
April 2	Test 3	