Faculty of Health Department of Psychology PSYC 3031 3.0 Section A INTERMEDIATE STATISTICS LABORATORY Tuesdays and Thursdays/2:30-5:30p.m./DB0009 (in-class)/DB2114 (lab) Summer 1/2017

Instructor and T.A. Information

Instructor: Monique Herbert, PhD Office: BSB 332 Office Phone: 416-736-2100 x 77186 Office Hours: In class and by appointment only Email: <u>herbertm@yorku.ca</u> (when sending an email please include PSYC3031A in the subject box and your full name and student number in the signature of the message)

Course Prerequisite(s): Course prerequisites are strictly enforced.

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.
- HH/PSYC 2020 6.00 (Statistical Methods I and II) or substitute

Course Credit Exclusions: None

Course website: <u>Moodle</u> (please sign up for a Moodle account as soon as possible as course materials and announcements will be posted to this site)

Course Description

This course provides students with the opportunity to apply, consolidate, and extend their statistical analysis skills to realistic psychological data using methods such as regression analysis. An important component of the course is the use of a statistical software package such as R, SPSS or SAS to prepare students for independent thesis research.

Program Learning Outcomes

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

- 1. Analyse psychological data using univariate statistics.
- 2. Use data analytic software for analysis of psychological data.

Specific Learning Objectives

- Demonstrate a deeper understanding of the statistical concepts reviewed and extended in this course.
- Identify appropriate statistical analysis(es) to address specific research question(s) and/or hypotheses.
- Identify and apply appropriate data management procedures to psychological data.
- Apply appropriate statistical analysis(es) to psychological data.
- Use statistical software for data management, exploration, and analysis of psychological data.
- Interpret and report the results of statistical analyses in APA format.

Required Text

There is no required text for this course, all course materials will be provided. However, there are some recommended text/resources below that you can consult and that I will direct you to these as we progress through the course.

Recommended Texts/Resources

- Navarro, D. J. (2015). *Learning statistics with R: A tutorial for psychology students and other beginners (Version 0.5)*. Retrieved from https://health.adelaide.edu.au/psychology/ccs/teaching/lsr/
- APA (2016). *Publication manual of the American Psychological Association*. Washington, DC: American Psychological Association.
- Nicol, A. A. M., & Pexman, P. M. (2010). *Presenting your findings: A practical guide for creating tables*. Washington, DC: American Psychological Association.

Osborne, J. W. (2012). Best practices in data cleaning. Los Angeles, CA: Sage Publications Inc.

Quick R - http://www.statmethods.net/index.html

R bootcamp - https://www.jaredknowles.com/r-bootcamp/

Course Requirements and Assessment

Students are required to complete all assignments and tests in order to receive a grade at the end of the course. The final grade for this course will be based on the components listed below. Please be sure to read my policy on late work, missed tests, or exams.

Assessment	Date of Evaluation (if known)	Weighting
Test 1	May 16	20
Test 2	June 06	20
Assignment#1	May 23	30
Assignment#2	June 15	30
Total		100%

Description of Assignments

Tests: Tests will be non-cumulative and cover the material from lectures, readings, and in-class activities. Tests may consist of multiple-choice, true-false, or open-ended questions.

Assignments: Assignments will provide students with the opportunity to apply the statistical concepts to realistic psychological data. Assignments provide you with hands-on opportunity to run statistical analyses, interpret, and present statistical findings to various audiences. More information on each assignment will be provided as the course progresses.

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 90, B + = 75 to 79, etc.)

(For a full description of York grading system see the York University Undergraduate Calendar - Grading Scheme for 2016-17)

Late Work/Missed Tests or Exams

Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (Attending Physician Statement which can be found at: http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf) may request accommodation from the Course Instructor. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Missed Tests: If you miss a test you will need to provide the following in order to have an opportunity to take a make-up test or receive an appropriate accommodation:*

- (a) An email to me (<u>herbertm@yorku.ca</u>) within 48 hours of the missed test outlining the circumstances for missing the test and
- (b) Formal documentation to verify the circumstances for missing the test (e.g., completed Attending Physician's Statement Form)

*Failure to provide the email and appropriate documentation will result in a 0 for any missed tests.

Upon receipt of the above email and documentation you will have two options:

- (1) one opportunity to take a make-up tests (this will be scheduled at a day and time to be announced by the instructor and may take a different form from the original test)**
 OR
- (2) opt to have the weight of the missed test added to your cumulative final exam

**Note: If you miss your make-up test option 2 will take immediate effect provided the appropriate documentation was received.

Missed Final Exam: If you miss your final exam please contact me via email (<u>herbertm@yorku.ca</u>) within 48 hours of the missed exam outlining the circumstances for missing the exam and provide formal documentation to verify the cirumstances for missing the exam, as well as a completed Final Exam Deferred Standing Agreement.

Add/Drop Deadlines

For a list of all important dates please refer to: <u>Summer 2017 - Important Dates</u>

	SU	S1	S2
Last date to add a course without permission of instructor	15-May	5-May	23-Jun
Last date to add a course with permission of instructor	29-May	12-May	30-Jun
Last date to drop course without receiving a grade	7-Jul	2-Jun	21-Jul
*Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – <u>Add and Drop Deadline Information</u>)	July 8-31	June 3-12	July 22-31

***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.

Information on Plagiarism Detection

Turnitin will be used to detect any evidence of plagiarism.

Electronic Device Policy

Students who wish to use an electronic device (e.g., tablets, laptops) during class time are asked to do so only for course-related purposes.

See also policy on use of electronic mobile devices during tests and exams.

Attendance Policy

Students are expected to attend all classes as weekly class activities builds on the previous week's material.

Academic Integrity for Students

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

It is recommended that you review Academic Integrigy by completing the <u>Academic Integrity</u> <u>Tutorial</u> and <u>Academic Honesty Quiz</u>

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 devise 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 <u>York University Accessibility Hub</u> is your online stop for accessibility on campus. The <u>Accessibility Hub</u> 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</u> <u>with disabilities policy</u>

Course Materials Copyright Information:

These course materials are designed for use as part of the **COURSE CODE** 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 (tentative)

Week	Date	Торіс	Classroom
1	May 02	Course Introduction	DB009
2	May 04	Introduction to R and RStudio	DB2114
3	May 09	Descriptive Statistics	DB009/DB2114
		Drawing Graphs	
4	May 11	Comparing two means (t-test)	DB009/DB2114
5	May 16	<mark>Test #1 (20%)</mark>	DB009
6	May 18	One-way independent groups ANOVA (including post-hoc)	DB009/DB2114
7	May 23	<i>Two-way independent groups ANOVA (including post-hoc)</i>	DB009/DB2114
		Assignment#1 due (30%)	
8	May 25	One-way repeated measures ANOVA (including post hoc)	DB009/DB2114
9	May 30	Review of correlation	DB009/DB2114
		Simple linear regression	
10	June 01	Mutiple linear regression	DB009/DB2114
	June 02	Last date to drop course without receving a grade	
11	June 06	Test#2 (20%)	DB009
12	June 08	Non-parametric tests	DB009/DB2114
	June 15	Assignment#2 due (30%)	