## **Faculty of Health**

## **Department of Psychology**

# PSYC 3031 3.0 A: INTERMEDIATE STATISTICS LABORATORY Wednesdays/2:30-5:30p.m./DB1004 (in-class); DB2114&DB2116 (lab)

## Fall/2018

#### **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: <a href="mailto:herbertm@yorku.ca">herbertm@yorku.ca</a> (when sending an email please include PSYC3031A in the subject box

and your full name and student number in the signature of the message)

T.A.	T.A. Ian Davidson	
Email	ianjdavidson.phd@gmail.com	
Office	BSB 150-A	
Office Hours	By appointment only	

#### 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
- Completed at least 54 earned credits

#### **Course Credit Exclusions**

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

**Course website: Moodle** 

## **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 advanced 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://bookdown.org/ekothe/navarro2/

Steve Nydick's *Introduction to R for Psychologists* 

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 - <a href="http://www.statmethods.net/index.html">http://www.statmethods.net/index.html</a>

R bootcamp - <a href="https://www.jaredknowles.com/r-bootcamp/">https://www.jaredknowles.com/r-bootcamp/</a>

#### **Course Requirements and Assessment:**

Assessment	Date of Evaluation (if known)	Weighting
Test 1	Oct 03	20
Test 2	Nov 21	20
Assignment#1	Oct 17	30
Assignment#2	Dec 05	30
Total		100%

#### **Description of Assignments**

**Tests:** Tests will be non-cumulative and cover the material from lectures, labs, 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 89, B+=75 to 79, etc.)

(For a full description of York grading system see the York University Undergraduate Calendar - <u>Grading Scheme for 2018-19</u>)

## Important New Information Regarding Missed Tests

For any missed tests, assignments, or exams students MUST complete the following online form **within 48 hours of the missed test**: <u>HH PSYC: Missed Tests/Exams Form</u>. This form will be received and reviewed in the Psychology undergraduate office. Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the test/assignment.

**Missed Tests:** Please note in completing the online form you will also need to include formal documentation to verify the circumstances for missing the test (e.g., completed Attending Physician's Statement Form) – this documentation should be submitted **within 7 days of the missed test.** 

Upon completion of the online form and after receipt of your supporting documentation you will have two options:

(1) **one opportunity** to write 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 notification and documentation were received.

Missed Final Exam: If you miss your final exam please also complete the online form within 48 hours of the missed exam and provide formal documentation (i.e., Attending Physician Statement and Final Exam Deferred Standing Agreement Form) within 7 days of the missed final exam.Add/Drop Deadlines

For a list of all important dates please refer to: Fall/Winter 2018-19 - Important Dates

	FALL	YEAR	WINTER
	<b>(F)</b>	<b>(Y)</b>	(W)
Last date to add a course without permission of	Sept. 18	Sept. 18	Jan. 16
instructor (also see Financial Deadlines)			
Last date to add a course with permission of	Oct. 2	Oct. 23	Jan. 30
instructor (also see Financial Deadlines)			
Drop deadline: Last date to drop a course without	Nov. 9	Feb. 8	March 8
receiving a grade (also see Financial Deadlines)			
Course Withdrawal Period (withdraw from a	Nov. 10 -	Feb. 9 -	March 9 -
course and receive a grade of "W" on transcript -	Dec. 4	Apr. 3	Apr. 3
see note below)			

<sup>\*</sup>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 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 <a href="York University Accessibility Hub">York University Accessibility Hub</a> is your online stop for accessibility on campus. The <a href="Accessibility Hub">Accessibility Hub</a> 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 **PSYC3031B** 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**

Week	Date	Topic	Classroom
1	Sep 05	Course Introduction	DB1004
2	Sep 12	Introduction to R and RStudio	DB2114/2116
3	Sep 19	Descriptive Statistics	DB1004/DB2114/2116
4	Sep 26	Comparing two means (t-tests)	DB1004; DB2114/2116
5	Oct 03	Test #1 (20%)	DB1004
	Oct 10	Reading Week - NO CLASS	
6	Oct 17	One-way independent groups ANOVA (including posthoc)	DB1004; DB2114/2116
		Assignment#1 due (30%)	
7	Oct 24	Two-way independent groups ANOVA (including posthoc)	DB1004; DB2114/2116
8	Oct 31	One-way repeated measures ANOVA (including posthoc)	DB1004; DB2114/2116
9	Nov 07	Review of correlation Simple linear regression	DB1004; DB2114/2116
	Nov 09	Last date to drop course without receving a grade	
10	Nov 14	Mutiple linear regression	DB1004; DB2114/2116
11	Nov 21	Test#2 (20%)	DB1004
12	Nov 28	Chi-square	DB1004; DB2114/2116
		Course wrap-up	
	Dec 05	Assignment#2 due (30%)	