Faculty of Health
Department of Psychology
PSYC 2022 3.0 A: STATISTICAL METHODS II
Monday & Wednesday/2:30-5:30pm/CLH-G
Summer (S1)/2019

Instructor and T.A. Information

Instructor: Monique Herbert, PhD
Office: 332 BSB
Office Phone: 416-736-2100 x77186
Office Hours: In class and by appointment only
Email: herbertm@yorku.ca (when sending an email please include PSYC2022A in the subject box and your full name and student number in the signature of the message)

T.A.	Mark Adkins
Email	madkins@yorku.ca
Office	051 BSB
Office Hours	By appointment only

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

- HH/PSYC 2021 3.00 (Statistical Methods I)

Course Prerequisite or corequisite(s):

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C when used as a prerequisite.

Course Credit Exclusions

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

Course website: Moodle

Course Description

A continuation of the study of fundamental concepts and techniques of descriptive and inferential statistics. Topics include correlation, regression, analysis of variance, and non-parametric statistics.

Program Learning Outcomes

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

1. Compute inferential statistics for univariate linear models (ANOVA, regression).
2. Interpret and report the results of inferential statistics for univariate linear models.
3. Recognize the limits of inferential statistics.

Topics Covered

- Review of basic statistical concepts
- One-way Independent Groups ANOVA (with contrasts)
- Two-way Independent Groups ANOVA (with interaction and contrasts)
- One-way Repeated Measures ANOVA (with contrasts)
- Correlation (including partial correlation)
- Simple Regression
- Multiple Regression

Effect size is included as part of all inferential statistics covered in this course.

Specific Learning Objectives

- Demonstrate a deeper understanding of the statistical concepts reviewed and extended in this course.
- Identify and apply appropriate statistical analysis(es) to address specific research question(s) and/or hypotheses.
- Demonstrate the ability to compute univariate inferential statistics (where necessary for conceptual understanding)
- Interpret and report the results of statistical analyses from statistical software, in APA forma for various research situations.
- Identify limits of conlusions based on inferential statistics (e.g., statistical vs practical significance)

Required Text

Custom Ll Pkg Stats For The Behavioral Sciences 10Th W/Chap 20
Mindtap
ISBN 9780176882488

Other Text (not required).

Howell, D. C. (2016). *Fundamental statistics for the behavioural sciences (9th ed.)*. Boston, MA: Cengage Learning.

Course Requirements and Assessment:

Assessment	Date of Evaluation	Weighting
Test#1	May 13	30%
Assignment#1	May 15	20%
Test #2	Jun10	20%
Assignment#2	Jun 12	30%
Total		100%

Description of Assignments

Assignments: Assignments will provide students with the opportunity to demonstrate their understanding with various statistical concepts and apply these statistical concepts to real-world problems, which will facilitate interpretation and presentation of statistical findings. **Assignments can be done singly or in groups of 2**.

Tests: Tests will be non-cumulative and cover the material from lectures and readings. The format of the tests will be a mix of multiple-choice and open-ended/short-answer questions (e.g., defining concepts or responses to analysis questions).

Note: You will receive each assignment well in advance of the due date. You should use the assignment to review and apply your understanding of the material and prepare for test.

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 - Grading Scheme for 2018-19)

Late Assignments/Missed Tests or Exams

Students with a documented reason for missing a course assignment/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.

Important New Information Regarding Missed Tests

For any missed tests 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 test/assignment.

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 (herbertm@yorku.ca) 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 - http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf)

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

Upon receipt of the above documentation you will have **one opportunity** to take a make-up test (this will be scheduled at a day and time to be announced by the instructor/TA and may take a different form from the original test)**.**

**If you miss the make-up without a valid reason/documentation you will receive a 0 on the test.

Late Assigments: Similar to your tests you must have a valid reason for missing the scheduled due date for your assignment. You will need to completed the missed test form (see link above) within 48 hours if your assignment will not or has not been be submitted on the scheduled due date. It is up to the course instructor to determine how much additional time if any you will be allowed to complete and submit the assignment.

Add/Drop Deadlines

For a list of all important dates please refer to: [Summer 2019 - Important Dates](#)

	SUMMER (S1)
Last date to add a course **without permission** of instructor (also see Financial Deadlines)	May 03
Last date to add a course **with permission** of instructor (also see Financial Deadlines)	May 10
Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)	May 27
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below)	May 28- Jun10

*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 [Information about the Senate Policy on Academic Honesty](#).

It is recommended that you review Academic Integrity information [SPARK Academic Integrity modules](#). 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: [York university academic accommodation for students with disabilities policy](#).

Course Materials Copyright Information

These course materials are designed for use as part of the **PSYC2022A** 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. [Intellectual Property Rights Statement](#).

Course Schedule

Week	Date	Topic	Chapters
1	Apr 29	*Course Introduction* *Review of major statistical concepts*	
	May 01	*Review of independent samples (between subjects) designs* *Independent samples t test*	10
2	May 06	*Introduction to Analysis of Variance*	12
	May 08	*Two-Factor Analysis of Variance*	14
3	May 13	**TEST 1 (30%) – COVERS Apr 29th -May 08th**	
	May 15	*Review of dependent samples (within subjects) designs* *Dependent samples t test* **ASSIGNMENT #1 DUE (20%)**	11
4	**May 20**	**Victoria Day – NO CLASS**	
	May 22	*Repeated-Measures Analysis of Variance*	13
5	May 27	*Correlation* **Last date to drop course without receiving a grade**	15
	May 29	*Introduction to Regression (Simple)*	16
6.1	Jun 03	*Introduction to Regression (Multiple)*	16
	Jun 05	*The Chi-Square Statistic: Test for Goodness of Fit and Independence*	17
6.2	Jun 10	**TEST #2 (20%) – COVERS May 15th – Jun 03rd** **Last date to withdraw from course**	
	Jun 12	**ASSIGNMENT #2 DUE (30%)**	