

Faculty of Health
Department of Psychology
PSYC 2022 3.0 A: STATISTICAL METHODS II
Monday/7:00pm – 10:00pm/CLH A
Fall/2018

Instructor and T.A. Information

Instructor: Jennifer Ruttle
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Office Hours	By Appointment			

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

This course is designed to provide the student with the statistical skills necessary to analyze, understand and communicate the data from psychological research. Topics covered will include ANOVAs, correlation and regression. Students should have a reasonably good working knowledge of high school mathematics. It is expected that students will complete independent work on the course material equivalent to two or three times that spent in lecture. Students should raise problems they have with the homework so concepts can be further explained. Statistics is a course that requires “doing the math”.

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

This course should allow students to be able to identify and calculate both descriptive and inferential statistics. By understanding topics covered above, students should gain knowledge of which test to use in a specific situation and how to communicate results to similarly familiar audiences.

Required Text

- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences*. Boston, MA: Cengage Learning.
- ACCESS TO MIND TAP IS REQUIRED*

*Quizzes will be given online using the mind tap program.

Course Requirements and Assessment:

Assessment	Date of Evaluation (if known)	Weighting
Quizzes	Best 5 out of 8	10%
Test 1	October 1st	20%
Test 2	November 5th	30%
Final Exam	Final Exam Period	40%
Total		100%

Description of Assignments

Each chapter will have a quiz associated with it that is accessible through MINDTAP. You can complete up to 8 quizzes and your best 5 marks will be counted, with each quiz counting for 2% of the overall 10% allotted for quizzes. You will have unlimited amounts of time to complete each quiz and have 3 attempts per question where your best mark is taken of the 3 attempts.

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](#))

Missed Evaluations

Students must e-mail the **instructor within 24 hours** of a missed evaluation (assignment, test or exam). 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://myacademicrecord.students.yorku.ca/pdf/attending-physicians-statement.pdf>) may request accommodation from the Course Instructor. Accommodations **may** include permission to write a make-up test the following week or a re-weighting of the course evaluations. Further extensions or accommodation will require students to submit a formal petition to the Faculty. No extensions or exemptions from online quizzes because of technical difficulties.

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.

Add/Drop Deadlines

For a list of all important dates please refer to: [Fall/Winter 2018-19 - Important Dates](#)

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

***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

It is expected that students do not put forward another's work as their own. Work on all the course evaluations should be done independently. Do not show your work to anyone (or make it available to anyone). Do not look at others' work.

Electronic Device Policy

No recording of lectures is allowed without the instructors permission. Use of computers is allowed but hand written notes are more efficient in this course.

Attendance Policy

Attendance will not be taken regularly but lecture attendance is expected so that problems with material can be discussed when homework questions are taken up in class. Both the instructor and TA are present in the lecture time slot to help students who are having difficulties.

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 PSYC 2022 A 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

Date	Topic	Chapter
Sept. 10	Review of Hypothesis Testing & Single Sample t-Test	9
Sept. 17	Repeated Measures t-Test & Wilcoxon T	11 & Appendix E
Sept. 24*	Independent t-Test & Mann-Whitney U	10 & Appendix E
Oct. 1**	Term Test 1– 120 minutes worth 20%	
Oct. 7	No Class – Reading Break	
Oct. 15	Introduction to ANOVA	12
Oct. 22*	Repeated Measures ANOVA	13
Oct. 29*	Two-Factor ANOVA	14
Nov. 5**	Term Test 2 – 120 minutes worth 30%	
Nov. 12	Correlation(Pearson & Spearman; not Point Biserial)	15
Nov. 19*	Regression	16
Nov. 26*	Chi-Square	17
Dec. 3*	Non-Parametrics for ANOVAs	Appendix E

* Online assignment due today at 6pm

** Online assignment due today at 4pm

Assignments: Complete the problem sets on MindTap for the following chapters: 10, 11, 12, 13, 14 & 15, 16, 17. No late marks or extensions given for technical difficulties.

Optional Activities: There are practice multiple choice questions on MindTap for each chapter.

ADDITIONAL TEST INFORMATION

- For tests you must bring your York photo ID, writing tools, and a **basic** calculator (+, -, \times , \div , and $\sqrt{\quad}$ only).
- A 3 x 5 inch “cheat sheet” with handwritten notes (***one side*** for term tests. **Two sides** allowed for the final).
- Statistical tables will be provided as needed.