Faculty of Health
Department of Psychology
PSYC 2022 3.0 Section M
STATISTICAL METHODS II
Monday and Wednesday /19:00-22:00/CLH A
Summer 2/2017

Instructor and T.A. Information

Instructor: Heather Jenkin
Office: 245 BS
Office Phone: x22542
Office Hours: Wednesday 17:45-18:45
Email: hjenkin@yorku.ca

T.A.	Annalise D'Souza	Graham McCreath
Email	aadsouza@yoruk.ca	Graham89@yorku.ca
Office		
Office Hours	In class and by appointment	In class and 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 website: Moodle

Course Description

This is a continuation of the study of fundamental concepts and techniques of descriptive and inferential statistics (PSYC2021). Topics include power, correlation, regression, analysis of variance and non-parametric statistics. The course involves formal lectures by the instructor on topics outlined below in the reading schedule. The required readings are central to the course.
Online Mastery Quizzes will provide students with opportiunity to work on course content on a weekly time schedule through self directed multiple choice tests. Multiple attempts are permitted (with a 3 hour reflection period to allow revision of content before further attempts).
Class time will also include tutorial/Q&A time that will serve to enrich, clarify, and illustrate assigned topics with the completion of homework problems in class. This is important as they provide useful experience with more complex statistical calculations. Suggested problems will be posted on moodle. It is advisable that students complete these problems before class and then difficulties can be discussed on the appropriate day.

Learning Outcomes

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

1. Compute and interpret univariate inferential statistics.
2. Recognize limits of conclusions based on inferential statistics.

Specific Learning Objectives

Students should be able to:

1. Correctly identify which inferential statistical test is appropriate given information of a research design.
2. Generate the statistical hypotheses (H_0 and H_1) that are applicable to various research situations
3. Demonstrate the ability to calculate the appropriate test statistic applicable to various research situations
4. Conduct any appropriate post-hhoc tests as required
5. Communicate the results effectively within APA literature reporting style

Required Text

- Gravetter, F.J. & Wallnau, L. B. (2016) Statistics for the Behavioural Sciences. 10th Ed. Belmont CA: Thomson/Wadsworth
- Supplemental Chapter 20 from the 8th edition package required (see York Bookstore)

Course Requirements and Assessment

Assessment	Date of Evaluation (if known)	Weighting
Master Online Quizzes	As scheduled	10
In class Pop Quizzes	As scheduled	5
Term Test 1 (non-cumulative)	June 28th	20
Term Test 2 (non- cumulative	July 24th	30
Final (Cumulative)	In exam period	35
Total		100%

Description of Assignments

Mastery Quizzes are online multiple choice tests that require 15/20 to show mastery for credit. If 15/20 is not reached then the grade is zero. They will be available for one week and multiple attemtps can be made (with a 2 hour breathing space between attempts for revision). Each mastered quiz counts as 2 % of final grade. There will also be six in-class pop quizzes, your best 5 will count for a total of 5%. Term Test 1 is worth 20%, Term test 2 is worth 30%. Term tests are held in class time. Questions may be in true/false, multiple choice, paragraph and short answer calculation format. A formulae sheet will be given as will any required statistical tables needed. The cumulative final could have true/false, multiple choice, paragraph and short answer calculation formats covering the entire course content and is worth 35%. For the term tests/final you must bring York sessional and photo ID.• You may bring writing tools, and a basic calculator (+, −, ×, ÷, and √ only). Any calculator more sophisticated will be confiscated until the test is over (Easy to check – does your calculator have any symbols such as these on it - ΣX, $\Sigma X 2$, $\sigma 2$, σ, S-SUM, S-VAR, sx, σx). Your cell phone may NOT be used as a calculator.

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

There are no extensions for late Mastery Quizzes or in-class quizzes. Students with a documented reason for missing a term 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.

Students **must email the instructor (**hjenkin@yorku.ca**) within 24 hours** of a **missed test** outlining the circumsatnces for missing the test (if non-medical circumstances I can advise the appropriate documentation required: such as death certificate, arrest report...). The Attending Physicians statement should be filled out within 48 hours of a miseed test, and submitted to the instructor as soon as possible.

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 7 calendar days 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: Summer 2017 - Important Dates

	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 – Add and Drop Deadline Information)	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

You are responsible for your own answers when submitting for grade. Do not show other students your answers or look at another students answers if you are expecting the work to be graded.

Electronic Device Policy

While I provide some of my slides as .pdf files before lecture I feel that you printing them out then writing supplemental notes in lecture is the best way to work through course content. Often I will leave space for the calculations to be completed in class during Q&A time. Students using electronic devices in class are asked to do so only for course-related purposes.

Attendance Policy

Students are expected to attend all classes as homework and Q &A sessions provide opportunities to discuss errors before they become problematic during tests. Attendance is recommended and occasionally will be taken through in class moodle spot quizzes.

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 Integrigy by completing the [Academic Integrity Tutorial](#) and [Academic Honesty Quiz](#).

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 [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:

Course Schedule:

Date	Topic	Readings
June19	Review of Power, Hypothesis testing with t, confidence intervals & effect size	8.6, 9
June 21	Independent and Dependent t tests & confidence intervals	10 - 11
June 26	F-max; Non-Parametric Mann-Whitney & Wilcoxon Tests	10; Supplement 20
June 28	Term Test 1	20%
July 3	Canada Day Holiday Monday – no class	
July 5	ANOVA - Hypothesis test & effect size	12
July 10	ANOVA - Tukey and Scheffé Post Hoc Tests	12
July 12	Repeated measures ANOVA	13,
July 17	Two factor ANOVA	14
July 19	Non-Parametric Kruskal-Wallis & Freidman Tests	Supplement 20
July 24	Term Test 2	30%
July 26	Hypothesis Tests with Spearman and Pearson correlation	15
July 31	Linear regression equations and Analysis of Regression	16
Aug 2-11	Cumulative Final scheduled in the SU exam period	35%