

**Faculty of Health
Department of Psychology
PSYC 2021 3.0 Section M
STATISTICAL METHODS I
Winter 2017
Wednesdays 7-10pm, Curtis Lecture Hall E**

Instructor and T.A. Information

Instructor: Jodi Martin, PhD

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Office Hours: Virtual (Moodle live chat): Tuesday 12pm-1pm; Live: In class or by appointment

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Peer Assisted Study Group Session (P.A.S.S.)

P.A.S.S. Leader: Zoia Iqbal

Email: zoia@my.yorku.ca

Office: 201 Strong College

Office Hours: Wednesday 3-4pm

P.A.S.S. Sessions Locations: Wednesday 4:30-6pm (201 Strong College)

Facebook: <https://www.facebook.com/groups/2021mpasspsyc/>

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

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

Course website: [Moodle](#)

Course Description

In this course, you will learn fundamental concepts, applications, and limitations of descriptive statistics. You will also have an introduction to inferential statistics through lecture topics such as hypothesis testing, z-tests and t-tests.

Learning Outcomes

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

1. Describe, explain, and calculate descriptive statistics.
2. Distinguish between descriptive and inferential statistics.
3. Recognize limits of descriptive statistics.

Course Learning Objectives

1. Differentiate the scales of measurement.
2. Be able to calculate descriptive statistics (i.e., measures of central tendency and variability).
3. Understand how to use appropriate descriptive statistics for different scales of measurement.
4. Demonstrate ability to generate null and alternative hypotheses for different research questions.
5. Demonstrate ability to form and test hypotheses related to different research questions (i.e., z -tests, t -tests)

Required Text

- Gravetter, F. J., & Wallnau, L. G. (2013). *Statistics for the Behavioural Sciences* (10th ed.). Belmont, CA: Wadsworth, Cengage Learning.

In addition to the textbook, you will also need access to MindTap, an online companion resource. You can purchase a copy of the textbook plus MindTap from the bookstore. If you do not prefer to have a hard copy you can purchase MindTap on its own as there is an e-copy embedded, however with this option you will not have access to the e-copy once your MindTap subscription expires. Note: MindTap is required for this course in order for you to complete the weekly assignments.

Course Requirements and Assessment

This course adopts a formative learning approach, under the belief that frequent, ongoing application of course materials greatly fosters learning of statistics. The final grade for this course will be based on the components listed below. Be sure to familiarize yourself with my policy on missed tests or exams, detailed below. MindTap assignments are due each week 2 days in advance of the next class. This will ensure that the instructor will be able to address any questions, comments or concerns following a review of your work.

Assessment	Date of Evaluation (if known)	Weighting
MindTap Assignments	Weekly	20%
Test #1	February 1	25%
Test #2	March 8	25%
Final Exam	Btwn April 7 - 24	30%
Total		100%

Description of Assignments

MindTap Assignments: These are weekly assignments which will focus on course material covered in class on a given week. You will have three attempts to complete each question on the assignment and your best mark will be recorded out of these three attempts.

Tests: Tests will be non-cumulative and cover the material from lectures, readings, and MindTap assignments preceding the test. 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).

Final Exam: The final exam will be non-cumulative and will occur during the final exam period.

When necessary, students will be provided with a formula sheet during tests and final exam.

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 - <http://calendars.students.yorku.ca/2016-2017/academic-and-financial-information/academic-services/grades-and-grading-schemes>).

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.

Two possible make-up dates will be set for each test and exam. You will only be permitted to write a make-up with appropriate documentation (see paragraph above). Students who miss the tests or final exam must contact the T.A. and the Course Instructor by email within 48 hours of the original test or exam date. If you cannot contact the T.A.s during this 48-hour period, subsequent documentation accounting for the delay must be provided.

Tests or exams missed due to non-medical circumstances must be supported by appropriate documentation, i.e., death certificates, obituary notice, automobile accident reports, airline/bus ticket/receipt for emergency travel (with date of booking on ticket), etc. Airline/train/bus ticket/receipts for emergency travel must indicate destination, departure, and return dates. Having to travel for non-emergent reasons or having to work at the time of a test are not considered valid excuses for missing a test or exam.

Upon receipt of the above documentation students will have two options:

(1) 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 tests, option 2 will take immediate effect, provided the appropriate documentation was received.

Important Note: You should be aware that if you miss the make-up test or exam as scheduled, you may not have the requisite 15% feedback on your course work to determine whether or not you need to drop the course, and you will not be provided an additional opportunity to make-up the test or exam; make-ups may not take the same format as the original test or exam (e.g., you may be asked to write an essay for the make-up). Therefore, it is in your best interest to write the tests as scheduled by the Course Instructor.

Add/Drop Deadlines

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

Important dates	Fall (F)	Year (Y)	Winter (W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 21	Sept. 21	Jan. 18
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 5	Oct. 19	Feb. 1
Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 11	Feb. 10	March 10
Course Withdrawal Period (withdraw from a course and receive a "W" on the transcript – see note below)	Nov. 12 - Dec. 5	Feb. 11 - Apr. 5	March 11 - Apr. 5

Electronic Device Policy

Students are permitted to use laptops during lectures, provided that their use does not interfere with their own learning or the learning of others in the class. The use of mobile phones is not permitted during lectures; students should ensure that their mobile phones are turned to vibrate, silent, or off during lectures to avoid interrupting the instructor and other students. Audiorecording of lectures is not permitted except in special circumstances that the instructor is made aware of and approves in advance.

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.

Attendance Policy

Attendance is highly recommended for success in this course. Although lecture content will overlap with the textbook content, lectures will include examples and applications of these materials not necessarily covered in-depth in the textbook. Students are expected to attend each class, barring illness of extenuating circumstance. When lectures are missed, students are responsible for making arrangements to obtain notes and information regarding the missed lecture from classmates.

Finally, certain classroom behaviours can be quite disruptive to the class. Out of respect for the other students in the class as well as the professor, please ensure that you do not: 1) arrive consistently late for class; 2) noisily start packing up early; 3) consistently leave before the class has finished; 4) talk amongst each other in class; 5) let your cell phone go off (or even worse, answer it!) in class.

Academic Integrity for Students

York university takes academic integrity very seriously, please visit [an overview of Academic Integrity at York University](#) from the Office of the Vice-President Academic.

The following links will assist you in gaining a better understanding of academic integrity and point you to resources at York that can help you improve your writing and research skills:

- [Information about the Senate Policy on Academic Honesty](#)
- [Online Tutorial on Academic Integrity](#)
- [Information for Students on Text-Matching Software: Turnitin.com](#)
- [Beware! Says who? A pamphlet on how to avoid plagiarism](#)
- [Resources for students to help improve their writing and research skill](#)

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 HH/PSYC 2021 3.0M 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](#)

Proposed Course Schedule:

Week	Class Date	Topic	Chapters
1	January 11	<i>Course Overview MindTap Demonstration Introduction to Statistics</i>	1, Appendix A
2	January 18	<i>Frequency Distributions</i>	2
3	January 25	<i>Central Tendency Variability</i>	3 4
4	February 1	Test #1 (25%) (covers chapters 1, 2, 3, 4)	
5	February 8	<i>z-scores: Location of Scores and Standardized Distributions</i>	5
6	February 15	<i>Probability Probability and Sample: The Distribution of Sample Means</i>	6 7
	February 22	No Class: Reading Week	
7	March 1	<i>Introduction to Hypothesis Testing</i>	8
8	March 8	Test #2 (25%) (covers chapters 5, 6, 7, 8)	
9	March 15	<i>Introduction to the t Statistic</i>	9
10	March 22	<i>Independent Samples t-test Dependent Samples t-test</i>	10 11
11	March 29	<i>Correlation Chi-square Statistic: Tests for Goodness of Fit and Independence</i>	15 17
	April 5	Review	
	April 7 – 24	Final Exam (30%) (covers chapters 9, 10, 11, 15, 17)	

The course schedule is tentative and subject to change.