

**Faculty of Health
Department of Psychology
PSYC 2021 3.0 Section P
STATISTICAL METHODS I
Winter 2017**

Instructor and T.A. Information

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Office	BSB 306H	BSB 269
Office Hours	Thursdays 2:30 - 3:30 p.m. (Please use the weekly online sign-up sheet for office hours. Link available on Moodle.)	Tuesdays (10:30-11:30a.m.) and Wednesdays (12-1:00p.m.)

Emails to Instructor and Teaching Assistants: Please include PSYC2021P in the Subject box and your full name and student number in the signature of the message. This is important information as it helps us to match a student to a specific course and provide the most relevant feedback.

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](#) (please sign up for a Moodle account as soon as possible as course materials and announcements will be posted to this site)

Course Description

The fundamental concepts and application of descriptive statistics. An introduction to probability and inferential statistics, including hypothesis testing with the normal- and t-distributions.

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.

Specific Learning Objectives

1. Identify the different scales of measurement.
2. Demonstrate the ability to calculate descriptive statistics such as measures of central tendency and variability using the appropriate formulas.
3. Choose descriptive statistics that are appropriate for summarizing and organizing variables with different scales of measurement.
4. Demonstrate the ability to summarize, organize, and present the essential features of data numerically and graphically.
5. Identify the differences between descriptive and inferential statistics (e.g., summarize sample data vs use sample data to make inferences about the population).
6. Identify limitations of descriptive statistics (e.g., cannot be used to test hypotheses about the population under study).
7. Demonstrate the ability to generate statistical hypotheses (i.e., null and alternative) that are applicable to various research situations.
8. Demonstrate the ability to formulate and perform hypothesis tests that are applicable to various research situations (i.e., z test, t tests).

Required Text

Textbook with MindTap:

Statistics for The Behavioral Sciences, 10th Edition

Frederick J Gravetter & Larry B. Wallnau

ISBN-10: 1305504917

ISBN-13: 9781305504912

You can purchase a copy of the textbook plus MindTap from the bookstore which offers two options:

Hard copy book + MindTap: 1305918541

Loose Leaf + MindTap: 1337128996

MindTap Student Registration URL: <https://login.nelsonbrain.com/course/MTPP-77HP-0W30>

Please see also the “MindTap Information” folder on Moodle for step-by-step instructions on how to set up your MindTap account.

Course Requirements and Assessment

Students are required to complete all assignments, tests, and the final exam in order to receive a grade at the end of the course. The final grade for this course will be based on the components listed below. Please be sure to read my policy on late work, missed tests or exams.

In order for the instructor to review your work on weekly MindTap assignments, students are required to complete all weekly MindTap Assignments **in advance** of the next class so that any questions/comments/concerns can be addressed.

Assessment	Date of Evaluation (if known)	Weighting
MindTap Assignments	Weekly	15%
Test#1	Jan 26	20%
Test#2	Mar 02	20%
Test#3	Mar 23	20%
Final Exam (cumulative)	Apr 7 - 24	25%
Total		100%

Description of Assignments/Tests/Exams

MindTap Assignments: These are weekly assignments which will focus on course material covered in class on a given week. **The Problem Sets count toward your final grade.** However, there are other activities (e.g., End-of-chapter problems, exam) available for you to practice course material.

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 cumulative and covers all course material.

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 - 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 (e.g., 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.

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:*

- An email to me (herbertm@yorku.ca) and/or one of your TAs within 48 hours of the missed test outlining the circumstances for missing the test and
- Formal documentation to verify the circumstances for missing the test (e.g., completed Attending Physician's Statement Form)

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

Upon receipt of the above email and documentation you will have two options:

(1) **one 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 test option 2 will take immediate effect provided the appropriate documentation was received.**

Missed Final Exam: If you miss your final exam please contact me via email (herbertm@yorku.ca) within 48 hours of the missed exam outlining the circumstances for missing the exam and provide formal documentation to verify the circumstances for missing the exam, as well as a completed Final Exam Deferred Standing Agreement.

Add/Drop Deadlines

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

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

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. In the event that a student is unable to attend a class please send an email to the instructor/TA informing them about your absence either prior to the class or within 48 hours after the missed 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 PSYC 2021 3.0P 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 (tentative):

Week	Date	Topic	Chapters
1	Jan 5	<i>Course Overview</i> <i>MindTap Demo</i> <i>Introduction to Statistics</i>	1, Appendix A
2	Jan 12	<i>Frequency Distributions</i>	2
3	Jan 19	<i>Central Tendency</i> <i>Variability</i>	3, 4
4	Jan 26	Test#1 (20%)	
5	Feb 02	<i>z-Scores: Location of Scores and Standardized Distributions</i>	5
6	Feb 09	<i>Probability</i> <i>Probability and Samples: The Distribution of Sample Means</i>	6, 7
7	Feb 16	<i>Introduction to Hypothesis Testing</i>	8
	Feb 23	Winter Reading Week - NO CLASS	
8	Mar 02	Test#2 (20%)	
9	Mar 09	<i>Introduction to the t Statistic</i>	9
	Mar 10	Last date to drop a course without receiving a grade	
10	Mar 16	<i>The t Test for Two Independent Samples</i> <i>The t Test for Two Related Samples</i>	10, 11
11	Mar 23	Test#3 (20%)	
12	Mar 30	<i>Chi-square Statistic: Tests for Goodness of Fit and Independence</i>	17
	Apr 7-24	Final Exam (cumulative) – 25%	