

YORK UNIVERSITY FACULTY OF HEALTH COURSE OUTLINE 2016 – 2017

Course: PSYCH. 2020 6.0G - Statistical Methods I and II

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Lecture: Tuesdays 2:30 - 4:30 in Rm. Vari Hall 1152A
Tutorials: Thursdays 2:30 - 4:30 in Rm. Vari Hall 1152A

Text: Hurlburt, R. T. (2012). Comprehending Behavioral Statistics. (Fifth Edition) –**DON'T GET THE FOURTH EDITION!** – Dubuque, Indiana: Kendall Hunt.

Prerequisite or Co-requisite: PSYCH. 1010 6.0 (with a minimum grade of C if Prerequisite)

General Description: This course is designed to provide the student with the statistical skills necessary to analyse and understand the data from psychological research. Topics covered will include basic concepts of measurement, measures of central tendency, variability, and relationship. As well, selected inferential statistics will be covered (e.g. tests on correlations and mean differences). You should have a reasonably good working knowledge of high school algebra, but there will be NO calculus or matrix algebra in this course.

Tutorials: Students will be required to attend a weekly tutorial. The tutorial's purpose is to review important topics discussed in the lecture and text, occasionally introduce new material, conduct review sessions for upcoming tests, take up assignments and tests, and provide an opportunity for students to ask questions.

MOODLE: IMPORTANT NOTE:

Make sure you know how to use York University's Moodle system, because it is an amazing resource. and because I will be posting a number of important announcements and documents on Moodle. You will be responsible for anything posted on Moodle for this course, so do check it out.

Office Hours: The learning of statistics is an additive process. That is to say, concepts introduced in the course will continually be reappearing, expanded upon, and related to new material. For this reason, it is critical that students obtain a clear understanding of the topics as they are presented in the course. Do NOT get behind! If you are having difficulty grasping any of the concepts discussed in the course, you are strongly advised to drop by the T.A.'s office during her/his office hours.

Grading: The learning of statistics tends to be facilitated by (a) frequent testing (both for diagnostic purposes and to increase frequency of studying) and (b) practising the material. Therefore, 80% of the final grade will be determined by four tests (worth 20% each). As well, there will be 4 practice assignments during each term (due dates TBA), totalling 20% of the final grade. While these practice assignments are not worth a large proportion of the final grade, they are VERY IMPORTANT. They are excellent for diagnosing problems early in the course (before you get too far behind), and the practice they provide can mean the difference between a good and poor grade. Note: Because of the high enrolment in this class, it will be necessary to do the assignments in groups of 4 people (in order to avoid overloading the teaching assistant with work). Therefore, find 3 other people to work with and let us know who they are (SOON). Each group will hand in ONE group assignment, and all of the group will receive the same grade. Note: As soon as your groups are formed make a list of everyone's name, email address, and phone number, and hand it in to the T.A. (You should also circulate this list amongst your group members.)

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(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>)

Missed Tests and Late Assignments

There have been increasing problems with missed tests in the past (particularly with respect to the misuse of the right to write makeup tests), so please read this section carefully. Normally, a student who misses a test or hands in an assignment late will be scored 0 unless the student produces valid medical documentation that she or he was medically unable to write the test. IT IS IMPORTANT TO NOTE THAT THE ATTENDING PHYSICIAN MUST FILL OUT THE YORK UNIVERSITY “ATTENDING PHYSICIAN’S STATEMENT” AND BE WILLING TO STATE THAT THE STUDENT WAS MEDICALLY UNABLE TO WRITE THE TEST. THE STUDENT MUST PRODUCE THE STATEMENT WITHIN 48 HOURS OF THE MISSED TEST AND TELEPHONE US AHEAD OF TIME IF HE/SHE KNOWS IN ADVANCE THAT THEY WILL BE TOO SICK TO WRITE. A simple doctor's note indicating that the student was in to see the doctor is not acceptable, and physician's statements which are produced weeks later will not be accepted. All Physicians’ Statements will be followed up and verified for authenticity.

PLEASE NOTE: ALL MAKEUP TESTS WILL BE SCHEDULED IN ONE BIG MAKEUP SESSION AT THE END OF THE COURSE (IN APRIL).

Add/Drop Deadlines

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

	Fall (F)	Year (Y)	Winter (W)
Important dates			
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)	Nov. 12 - Dec. 5	Feb. 11 - Apr. 5	March 11 - Apr. 5

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](#)

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Test Banks:

The use of test banks is not permitted in this course and may be considered a potential breach of academic honesty. This includes but is not limited to; buying or selling test banks.

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](#)

Cheating (Academic Dishonesty). The penalties for cheating and other forms of academic dishonesty are severe. Don't risk your academic career. For more details, see the 2016-2017 York University Calendar under "Academic Dishonesty". **Note that you cannot escape the penalty for cheating by dropping the course.**

Recording of Lectures: The recording of lectures is not allowed, nor is the recording of tutorials.

Lecture Schedule and Topics to be Covered

Preamble: Since the textbook is generally a thorough, excellent one, the lecture material will follow the textbook closely. However, some additional topics not mentioned in the text will be discussed in class. It is **strongly** recommended that you read the material in the text **before** it is covered in class.

Course Materials Copyright Information:

These course materials are designed for use as part of the PSYC 2020 6.0G 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](#)

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Tentative Lecture & Test Schedule:

NOTE: EXCEPT FOR TESTS, THE DATES BELOW ARE **APPROXIMATE** AND MAY CHANGE

<u>Week of:</u>	<u>Topics:</u>	<u>Chapters to Read:</u>
Sept. 12-16	Introduction, Math Concepts	Frequency Distributions 1, & 2
Sept. 19-23	Frequency Distributions	3
Sept. 26-30	Measures of Central Tendency	4
Oct. 3-7	Measures of Variation	5
Oct. 10-14	Using Frequency Distributions	6
Oct. 18	<u>Test #1</u> (Covering Chapters 1 through 6)	
Oct. 25	Samples and Sampling Distributions	7
Oct. 27	NO TUTORIAL (Co-Curricular Day)	
Oct. 31 – Nov. 4	Parameter Estimation	8
Nov. 7-11	Evaluating Hypotheses	9
Nov. 14-18	Evaluating Hypotheses, Single-Sample Mean Inferences	10
Nov. 21-25	Single-Sample Mean Inferences	10
Nov. 29	<u>Test #2</u> (Covering Chapters 7 through 10)	
<u>WINTER TERM:</u>		
Jan. 5	Test #2 Review	
Jan. 9-13	Inferences about 2 Independent Means	11
Jan. 16-20	Inferences about 2 Dependent Means	12
Jan. 23-27	Statistical Power	13 (but SKIP 13.3)
Jan. 30 – Feb 3	One-way Analysis of Variance (ANOVA)	14
Feb. 6-10	ANOVA, Multiple Comparisons (Post Hoc Tests only)	14, 15(Sect.15.1 only)
Feb. 13-17	Multiple Comparisons	
Feb. 20-24	READING WEEK – NO CLASSES	
Feb. 28	<u>Test #3</u> (Covering Chapters 11 through Section 15.1 of Chapter 15)	
Mar. 6-10	Two-way Analysis of Variance	15 (but SKIP 15.3)
Mar. 13-17	Two-way Analysis of Variance, Correlation	15,16
Mar. 20-24	Correlation, Linear Regression	16,17
Mar. 27-31	Linear Regression	17
Apr. 4	<u>Test #4</u> (Covering Chapters 15 through 17 and Lecture Notes)	

Good luck to you all, and welcome to the course!