

**Course:** HH/SC PSYC 2021 3.0 B – Statistical Methods I  
draft April 29/13

**Term:** Summer S1 2013

**YORK UNIVERSITY, FACULTY OF HEALTH  
DEPARTMENT OF PSYCHOLOGY**

**Course:** HH/SC PSYC 2021 3.0 B – Statistical Methods I

**Term:** Summer S1 2013

**Course Webpage:** moodle.yorku.ca

**Time and Location:** Lectures Tuesday and Thursday 2 - 5 in SLH D

**Course Instructor:**

Heather Jenkin  
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Office hours: Tuesday and Thursday in class or by appointment

**Teaching Assistants**

Holly Clayton

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**Secretary** Ms Barb Thurston can be found in 283 BS

**Prerequisite / Co-requisite:** AK/AS/HH/SC/PSYC 1010 6.00 (with a minimum grade of C when used as a prerequisite).

**Course Learning Objectives**

*This course is designed to provide the student with the statistical skills necessary to describe and understand the data from psychological research. It is a course in the study of fundamental concepts and techniques of descriptive and inferential statistics. Some topics covered will include: frequency distributions, measures of central tendency and variability, z-scores and probability, hypothesis tests using z scores and single sample t-tests; estimation, correlation and the Chi-Square non parametric test.*

**Organization of the Course -**

*The course involves formal lectures by the instructor on topics outlined below in the reading schedule. The required readings are central to the course. Class time will also include practical time that will serve to enrich, clarify, and illustrate assigned topics with the completion of weekly problems in class. This is important as they provide useful experience with statistical tasks. Suggested problems will be posted on moodle. It is advisable that students complete these problems ahead of time. In class quizzes will keep students on task and allow for quick feedback where difficulties occur.*

**Course logistics**

- Lectures will begin at 2.
- Quizzes and problem take up time will occur as well as lectures on material. This is a fast paced course and a lot of material will be covered each week. This course is not an online course and students are expected to be in lecture.
- Lecture information will be on Moodle. Make sure that you sign up for a Moodle account as soon as possible. <http://moodle.yorku.ca>

**Course Text / Readings**

*The following text is required for the course: Gravetter, F.J. & Wallnau, L. B. (2013) Statistics for the Behavioral Sciences. 9th Ed. Belmont CA: Thomson/Wadsworth.*

**Evaluation:**

*The final grade for the course will be based on the following items weighted as indicated:*

Quizzes	6%	in class throughout the course (practically each lecture), best 6 out of 8 count.
Term Test 1	25%	in class May 21st
Term Test 2	30%	in class June 2nd
Final	39%	in the exam period June 15 - 17 (do not plan trips during the exam period)

The in-class tests will cover material from lectures and readings preceding the test date. The final examination will be cumulative, covering all course material.

**Missed Tests:** Students must email the **instructor within 24 hours** of a missed evaluation. Any student with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (Attending Physician's Statement) may request accommodation from the Course Instructor. The Attending Physician's Statement form can be found on the moodle website. Accommodations **may be** permission to write a make-up test, re-weighting of course evaluations. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

#### ADDITIONAL TEST INFORMATION

- For tests you must bring York sessional and photo ID, writing tools, and a **very basic** calculator (+, -, x, ÷, and  $\sqrt{\quad}$  only).
- a 3 inch by 5 inch "cheat sheet" with handwritten notes (one side only for term tests, both sides allowed for final)
- Statistical tables will be provided as needed.

Date	Topic	Readings
May 7	Basic concepts and Frequency Distribution	Ch 1, 2, Appendix A
May 9	Central Tendency	Ch 3
<b>May 10</b>	<b>Last date to enroll without instructor's permission</b>	
May 14	Variability	Ch 4
May 16	z-scores and Standardized Distributions	Ch 5
<b>May 17</b>	<b>Last date to enroll with instructor's permission</b>	
<b>May 21</b>	<b>Test 1 - 100 minutes worth 25%</b>	
May 23	Probability and Distribution of sample means	Ch 6, 7
May 28	Introduction to hypothesis testing	Ch 8
May 30	Introduction to the t statistic and Estimation	Ch 9
<b>May 31</b>	<b>Last date to drop without receiving a grade</b>	
June 4	Concepts of t tests for independent samples, dependent samples and Estimation	Ch 10, 11
<b>June 6</b>	<b>Test 2 - 100 minutes worth 30%</b>	
June 11	Correlation and the regression line	Ch 15, 16
June 13	Chi-Square	Ch 17
<b>June 19-21</b>	<b>Final cumulative examination - 180 minutes worth 39%</b>	

#### IMPORTANT COURSE INFORMATION FOR STUDENTS

##### Academic Honesty and Integrity

York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (<http://www.yorku.ca/secretariat/policies/document.php?document=69>). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of the student to abide by such standards.

### **Access/Disability**

York University is committed to principles of respect, inclusion and equality of all persons with disabilities across campus. The University provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University.

Students in need of these services are asked to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at the following websites:

Counselling & Disability Services – <http://www.yorku.ca/disabilityservices>  
Counselling & Disability Services at Glendon - <http://www.glendon.yorku.ca/counselling> York Accessibility Hub - <http://www.yorku.ca/accessibilityhub/index.htm>

### **Ethics Review Process**

York students are subject to the York University *Policy for the Ethics Review Process for Research Involving Human Participants*. In particular, students proposing to undertake research involving human participants (e.g., interviewing the director of a company or government agency, having students complete a questionnaire, etc.) are required to submit an *Application for Ethical Approval of Research Involving Human Participants* at least one month before you plan to begin the research. If you are in doubt as to whether this requirement applies to you, contact your Course Director immediately.

### **Religious Observance Accommodation**

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre or online at [http://www.registrar.yorku.ca/pdf/exam\\_accommodation.pdf](http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf)(PDF)

### **Student Conduct in Academic Situations**

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available at - <http://www.yorku.ca/secretariat/policies/document.php?document=82>

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve students' research and writing skills, and cope with University life. Students are expected to review the materials on the Academic Integrity website at - <http://www.yorku.ca/academicintegrity>