

PSYCHOLOGY DEPARTMENT

Course: AK/AS/SC PSYC 2021 3.0A – Statistical Methods I

Course Webpage: This course uses Moodle.

Term: Summer Term 2018

Prerequisite / Co-requisite: AK/AS/HH/SC/PSYC 1010 6.00 or AK/HH/PSYC 2410 6.00, GL/PSYC 2510 6.00, with a minimum grade of C when used as a prerequisite. Course credit exclusions: AK/AS/HH/SC/PSYC 2020 6.00, AK/PSYC 2510 3.00 (prior to Summer 2002), SC/BIOL 2060 3.00, SC/BIOL 3090 3.00 (prior to Summer 2000), AS/ECON 2500 3.00, AK/ECON 3470 3.00, AS/HH/SC/KINE 2050 3.00, AK/AS/SC/MATH 2500 3.00, AK/AS/SC/MATH 2560 3.00, AS/POLS 3300 6.00, AS/SOCI 3030 6.00, GL/PSYC 2530 3.00.

Course Instructor & TA's

Instructor: Ed Haltrecht haltrech@yorku.ca Office hours, Phone number, Office location to be announced

TA's To be announced

Secretary: Terri Cawley 416-736-2100 ext. 66178 BSB 2nd floor

Time and Location

Lectures Mon/Weds 7-10pm
TA's by appointment

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. The following outline details each of the elements that are covered in the course.

Organization of the Course

Classes are lecture style working on the board with limited visual aids. TA's are available by appointment. The text receives very positive reviews by students and contains many practice problems. An accompanying text sponsored WEB site provides many more practice problems with automatic correction facilities. Copies of the lecture notes are not available.

While the content, and order of presentation is fixed, exact coverage on a class by class basis may be adjusted based upon progress and student feedback- check regularly with course instructor.

May 23	Introduction to course
	Broad overview - Descriptive Statistics- mode, median, mean
May 28	Broad overview continued - range, variance, standard deviation, rules of thumb, percentiles
May 30	(Section numbers refer to text - 10 th edition of book)
	1.1 Populations and samples
	1.3 Variable and measurement, Discrete and continuous variables
	1.4 Statistical notation
	2.1-2.3 Frequency distributions- tables, graphs, shape
	2.4 Percentiles, percentile ranks
	3.1 – 3.6 Central tendency
	4.1 Range
	4.2 – 4.6 Standard deviation, variance
June 4	5.1- 5.6 z-Scores
	6.1- 6.3 Probability
June 6	7.1 – 7.4 The distribution of sample means

June 11	Test 1 (2¾ hours) worth 50% of final course grade - covering Chapters 1 - 7 75% multiple choice (75 items) 25% problems where student must show work (likely 5 items worth about 5 marks each - no choices)
June 13	8.1 – 8.6 Hypothesis testing
June 18	9.1 – 9.4 t-statistic
	10.1 – 10.5 Hypothesis tests with two independent samples
June 20	11.1 – 11.5 Hypothesis tests with related samples Estimation
June 25	15.1 – 15.4 Correlation
June 27	17.1 – 17.4 Chi-Square statistic
July 3	Review in class (optional)
July 5 - 7	Exam 2 (3 hours) worth 50% of final course grade - covering all material since Test 1. Same format as Test 1. Check for new class room - Exact date during the final examination period to be determined by Registrar's Office.

Four Course Text Options (PICK ONLY 1 OPTION).

- Gravetter, F.J. & Wallnau, L. (2016). *Statistics for the Behavioral Sciences*, 10th Edition + Mindtap Belmont, CA: Wadsworth. *Printed Access Code* – 1305918541
- Loose-leaf *Statistics for the Behavioral Sciences*, 10th Edition + *MindTap Printed Access Code* – 1337128996
- MindTap Instant Access Code* - 1305647319 (the bookstore can generate and sell a code on the spot for students that only want digital access – MindTap houses an eBook and all study tools)
- Use the 8th or 9th edition. If you plan on taking Psyc 2022 (the next stats course) this summer or next fall/winter, you might want to see what edition of the text they are planning on using. Any of the 8, 9, or 10th edition will work fine. We will have answers to all of the end of chapter questions available for the 9th and 10th editions. The text only gives the answers for half of the questions.

Course Enrolment

Last date to enrol without permission of course instructor – May 28

Last date to enrol with permission of course instructor – June 4

Last date to drop courses without receiving a grade – June 18

The course instructor and TA's do not get involved in enrolment issues - see department administration.

Evaluation

Two exams each worth 50%. See above schedule for dates.

Missed Classes and other matters

We do not take attendance, nor do we cover material in writing or by e-mail for missed classes. Students may wish to tag a fellow student for notes in case of absence. Please contact your TA for appointments in case you are having any difficulties in understanding the material.

Grading and Missed Tests

Grading: 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.). 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.)

Missed Tests: Students are expected to write each test on the dates specified. There will be **no make-up tests**, except under extraordinary documented circumstances. **If you miss a test for no documented reasons, you will receive a grade of zero.**

If you have a legitimate reason (e.g., death in the family, severe illness, etc.) for being excused from a test/exam, and have documentation to verify your absence (please see below), you may take a make-up test/exam in lieu of

the missed test/exam. Please note that we are extremely strict about the conditions that will allow you to write a make-up examination – nonetheless, you should contact your TA regardless of your reason if you have or will miss an examination. You must contact your course TA, **at least one day in advance of the exam/test** and provide documentation in order to be permitted to take a make-up exam/test. In the case of an emergency, **contact your course TA, as soon as possible. In this email, please (a) outline the reason for your absence, and (b) confirm that you have medical or other relevant documentation to support this reason. Again, be sure to note your course section and your full name and student number in the subject header of your email.**

Please note that there will be *one* set date for the make-up test/exam. **If both exams are missed, students will have to retake the course unless they successfully petition.** Please also note that if you miss a test, regardless of your reason, you have waived the right to have a specific percentage of graded feedback available to you prior to the drop date.

Note also that deferred final exams are held on a single common date determined by the Department of Psychology. No individualized testing is available unless arranged formally through one of the offices at the University (e.g., Counselling and Disability Services (CDS)).

Documentation when missing an exam/test

If you produce a valid medical document, signed by a physician, **stating that you were medically unable to take the exam/test for a specific time period**, you will be able to take a makeup exam/test. If you miss an exam/test for non-medical reasons, you still must produce supporting documentation (e.g., death certificate, obituary notice, automobile accident report, airline ticket for emergency travel, etc.). Missing an exam/test for a vacation, etc., is not an acceptable reason. If you are ill or facing extreme personal circumstances and are unable to get the required documentation, we highly recommend that you consider dropping the course.

Once you have contacted your TA, you will need to have completed the attending physician's statement found at <http://www.registrar.yorku.ca/exams/deferred/>. This should be brought to your TA's mailbox or faxed to the psychology department (with Attention *Ed Haltrecht*) at 416-736-5814. You will need to receive confirmation of the make-up examination date from your TA; you should be back in touch within a few days with your TA if you have not heard back. It is your responsibility to find out the information about when the make up test/exam is and ensure that you are set to write the make-up test/exam.

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents) - <http://www.yorku.ca/secretariat/senate/committees/ascp/index-ascp.html>

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation