Instructor and T.A. Information
Instructor: Ed Haltrecht
Office: BSB101
Office Phone: c/o Terri Cawley 416 736-2100 ext 66178
Office Hours: TBA
Email: haltrech@yorku.ca

T.A. Nikan Eghbali (for students with last names beginning with A-K)
T.A. Jeannine Holmes (for students with last names beginning with L-Z)
Email nikane@yorku.ca j9holmes@yorku.ca
Office TBA TBA
Office Hours TBA TBA

Course Prerequisite(s): Course prerequisites are strictly enforced.
- HH/PSYC 2021 3.00 (Statistical Methods I)

Course Prerequisite or corequisite(s):
- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C when used as a prerequisite.

Course website: Moodle

Course Description
This course builds on material presented in Statistical Methods I. Students will gain a greater understanding of the statistical procedures used by researchers in the behavioural sciences, in addition to the appropriate use and interpretation of statistical results. Topics that will be covered include: hypothesis tests using t-tests (for independent and related measures); Analysis of variance (ANOVA) for repeated measures, independent measures and two factors; multiple comparison procedures (post-hoc analysis), correlation and prediction, and non-parametric techniques. Students should be able to identify the correct statistical test to use. Mathematical competency gained from PSYC2021 is expected- see Appendix A in the text for a Basic Mathematics Review.

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

1. Compute and interpret univariate inferential statistics.
2. Recognize limits of conclusions based on inferential statistics.
**Required Text**

Four Course Text Options (PICK ONLY 1 OPTION).


c. Ceb E-book MindTap ISBN: 97813105647312 (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) (~$99.95)

d. Use the 8th or 9th edition. 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 only. The text only gives the answers for half of the questions.

**Course Requirements and Assessment**

There are two class tests. The first is held in the regular classroom during a regular class. The second test will be scheduled during the final exam period

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Date of Evaluation</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>October 31, 2016</td>
<td>50%</td>
</tr>
<tr>
<td>Test 2</td>
<td>Between Dec 7 and Dec 22, 2016</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

**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. Further extensions or accommodation will require students to submit a formal petition to the Faculty.
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.

Add/Drop Deadlines

For a list of all important dates please refer to: Important Dates

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

<table>
<thead>
<tr>
<th>Important dates</th>
<th>Fall (F)</th>
<th>Year (Y)</th>
<th>Winter (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last date to add a course without permission of instructor (also see Financial Deadlines)</td>
<td>Sept. 21</td>
<td>Sept. 21</td>
<td>Jan. 18</td>
</tr>
</tbody>
</table>
## Important dates

<table>
<thead>
<tr>
<th></th>
<th>Fall (F)</th>
<th>Year (Y)</th>
<th>Winter (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last date to add a course with permission of instructor (also see Financial Deadlines)</td>
<td>Oct. 5</td>
<td>Oct. 19</td>
<td>Feb. 1</td>
</tr>
<tr>
<td>Last date to drop a course without receiving a grade (also see Financial Deadlines)</td>
<td>Nov. 11</td>
<td>Feb. 10</td>
<td>March 10</td>
</tr>
<tr>
<td>Course Withdrawal Period (withdraw from a course and receive a &quot;W&quot; on the transcript – see note below)</td>
<td>Nov. 12 - Dec. 5</td>
<td>Feb. 11 - Apr. 5</td>
<td>March 11 - Apr. 5</td>
</tr>
</tbody>
</table>

## Electronic Device Policy

No electronic devices policy in class lectures. No phones allowed in exams.

## Attendance Policy

No attendance policy

## 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 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 too; 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 devise 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 Schedule:

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 12</td>
<td>Intro to course; review of hypothesis testing, z-test, effect size, power, single sample t-test</td>
<td>8, 9</td>
</tr>
<tr>
<td>Sept 19</td>
<td>t-test for Two Independent Samples; t-test for Two Related Samples</td>
<td>10, 11</td>
</tr>
<tr>
<td>Sept 26</td>
<td>ANOVA - introduction and Single Factor Independent Measure Design</td>
<td>12</td>
</tr>
<tr>
<td>Oct 3</td>
<td>ANOVA - Repeated Measures</td>
<td>13</td>
</tr>
<tr>
<td>Oct 10</td>
<td></td>
<td>Thanksgiving – no classes</td>
</tr>
<tr>
<td>Oct 17</td>
<td>ANOVA – Two-Factor (Independent Measures)</td>
<td>14</td>
</tr>
<tr>
<td>Oct 24</td>
<td>Correlation (Pearson and Spearman)</td>
<td>15</td>
</tr>
<tr>
<td>Oct 31</td>
<td>Test 1 (2½ hours) worth 50% of final course grade - covering Chapters 8-13,15 Chapter 14 will be covered in test 2. 70% multiple choice (70 items); 30% problems where student must show work. (likely 6 items worth about 5 marks each) (No choices).</td>
<td></td>
</tr>
<tr>
<td>Nov 7</td>
<td>Regression – Equations and Analysis of Regression (16.3 and 16.4 not covered)</td>
<td>16.1, 16.2</td>
</tr>
<tr>
<td>Nov 14</td>
<td>Non-parametric tests (Mann-Whitney; Wilcoxon)</td>
<td>Appendix E1,2,3</td>
</tr>
<tr>
<td>Nov 21</td>
<td>Choosing the right statistics</td>
<td>Moodle file</td>
</tr>
<tr>
<td>Nov 28</td>
<td>Review of Chapters 14, 16, E1,2,3</td>
<td>14,16, App E1,2,3</td>
</tr>
<tr>
<td>Dec 5</td>
<td>Review of choosing the right statistics</td>
<td>Moodle file</td>
</tr>
<tr>
<td>Dec 7-22</td>
<td>Exam 2 (3 hours) Worth 50% of final course grade- covering all material covered since Test 1 and Chapter 14. Same format as Test 1. Check for new class room - Exact date during the final examination period to be determined by Registrar’s Office.</td>
<td></td>
</tr>
</tbody>
</table>