YORK UNIVERSITY

LA & PS Department of Economics

WINTER 2021

AP/ECON 2500.03 M: INTRODUCTORY STATISTICS FOR ECONOMISTS I TR $16{:}00\,{-}\,17{:}30$

Instructor:	VASSILIOS BARDIS
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Course Website:	On eClass.yoku.ca

PREREQUISITES

Grade 12U Advanced Functions or equivalent. Course credit exclusions: AP/ADMS 2320 3.00, AP/POLS 3300 6.00, AP/SOCI 3030 6.00, ES/ENVS 2009 6.00, GL/MATH/MODR 1610 3.00, GL/POLS/SOCI 2610 3.00, GL/PSYC 2530 3.00, HH/KINE 2050 3.00, HH/PSYC 2020 6.00, HH/PSYC 2021 3.00, SC/BIOL 2060 3.00, SC/GEOG 2420 3.00, SC/MATH 2500 3.00, SC/MATH 2560 3.00, SC/MATH 2565 3.00. Note 1: Acceptable course substitutes are available in the Calendar. Note 2: students who have taken SC/MATH 1131 3.00 may not take AP/ECON 2500 3.00, PRIOR TO FALL 2009: Course credit exclusions: AK/ADMS 2320 3.00, SC/BIOL 2060 3.00, AK/ECON 3470 3.00, AS/ECON 2500 3.00, ES/ENVS 2010 6.00, AS/SC/GEOG 2420 3.00, AS/KINE 2050 3.00 (Prior to Fall/Winter 2007-08), HH/KINE 2050 3.00, AK/AS/SC/MATH 2560 3.00, AK/AS/SC/PSYC 2021 3.00 (Prior to Fall/Winter 2007-08), HH/PSYC 2020 6.00 (Prior to Fall/Winter 2007-08), HH/PSYC 2020 6.00, AK/AS/SC/PSYC 2021 3.00, AS/SOCI 3030 6.00.

COURSE DESCRIPTION

The course provides an introduction to statistical techniques. Topics covered include descriptive statistics and frequency distributions, measures of location and dispersion, random variables, sampling distributions, probability theory and mathematical expectations, the use of well-known probability distributions including the normal distribution, correlation, and the design and interpretation of hypothesis tests.

COURSE ORGANIZATION

(A) Content Delivery (computer with internet access required)

There are *no* virtual live lectures. The course content will be delivered online *asynchronously* on the eClass course website using a *combination* of the following:

- (1) detailed notes/handouts or readings
- (2) notes/handouts accompanied by pre-recorded short videos
- (3) pre-recorded video lectures

These will be posted weekly on the course website, mainly on the officially scheduled class dates (Thursday of each week). They will be complemented by practice sets which will also be posted approximately weekly and usually at the end of the week.

(B) Tests and Exams (computer with internet access required)

The following apply to the tests and exams in the course:

- They will be based on the material covered in (1), (2) and (3) above and draw from (but not be limited to) the questions in the practice sets.
- They will be available, take place and/or have to be submitted on the course website on eClass.
- All terms tests will be held and/or have to be submitted during the originally scheduled class times (see below under *Grading* for the specific dates and times).
- The final exam will be held during the examination period on the date and times scheduled by the University (to be announced).

(C) Virtual Office Hours (computer with microphone and internet access required)

Regular office hours will use Zoom and will be held each week during the officially scheduled class times. Zoom registration is required. The *times* and *registration link and instructions* will be available under "Virtual Office Hours" on the course website.

Please note:

1) all handouts and recordings should be used for educational purposes only and as a means for enhancing accessibility;

2) students *do not have permission to duplicate, copy and/or distribute the handouts, practice sets, tests and recordings* outside of the class (these acts can violate not only copyright laws but also <u>FIPPA</u>); and 3) all recordings will be destroyed after the end of classes.

GRADING

The course grade will be based on **three term tests** and a **final exam**. There are <u>no deferred term tests</u>. There will a deferred final exam for students who qualify (see below).

The course grade will be calculated as follows. Let H, M and L denote the highest, second highest and lowest term test grades and X denote the final exam grade (each grade out of 100). Then the course grade, Y, will be

 $Y = \max (0.2 H + 0.2 M + 0.2 L + 0.4 X, 0.25 H + 0.25 M + 0.5 X, 0.3 B + 0.6 X, 0.7 X).$

It follows from the above that

- the maximum weight of the term work is 60% and the minimum weight of the final exam is 40%.
- for students who complete all three tests, the worst test will be ignored if it benefits the student.
- for students who complete two of the three tests the weight of each test is 25% and the final exam weight is 50%. (No penalty for not completing a single test due to technical issues or otherwise.)
- for students who complete only one of the three tests, the weight of that test is 30%, the final exam weight is 60% and *zero* is assigned to 10% of the course grade.
- if all three tests are *not* completed, then a grade of *zero* will be assigned to 30% of the course grade and the weight of the final exam will be at its maximum of 70%.

Term Work

Each quiz or test will have to be completed and/or submitted on the course website during the officially scheduled class times. The composition of each test will rely more heavily on the material covered in the three to four weeks preceding the date of test. The test dates will be announced on the first week of classes.

Final Exam

The final exam will be comprehensive (based on all the material covered in the course) and will held during the examination period on the date and time scheduled by the University (to be announced). The opportunity to write a deferred exam will be available to students for whom a religious observance coincides with the date of the final exam or who are unable to complete the exam due to reasons beyond their control. If this applies to you, please email me to let me know. (*After* the date of the final exam, students who did not complete the final exam must request deferred standing by completing and then uploading the required form on the course website using the link "Deferred Exam Request." The information on deferred standing is available at https://myacademicrecord.students.yorku.ca/deferred-standing.

Academic Honesty and Integrity

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's <u>Academic Integrity module</u> at the beginning of the course. Breaches of academic integrity range from cheating to plagiarism (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.). All instances of academic dishonesty in this course will be reported to the appropriate university authorities, and can be punishable according to the <u>Senate Policy on Academic Honesty</u>.

<u>Reappraisal of Term Work</u>: It is strongly recommended that reappraisal of students' term work should be completed during the term and prior to the submission of final course grades.

USEFUL COMPUTING LINKS

Below are some useful links for computing information, resources and help:

- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities: <u>https://accessibility.students.yorku.ca/</u>.
- <u>Student Guide to Moodle</u>
- Zoom@YorkU Best Practices
- Zoom@YorkU User Reference Guide
- <u>Computing for Students Website</u>
- <u>Student Guide to eLearning at York University</u>

SOME IMPORTANT DATES

Classes start / end	Jan. 11 / Apr. 12
Winter Reading Week	Feb. 13 - 19
Winter Examination Period	Apr. 14-28
Last date to add a course without/with permission of instructor	Jan. 25 / Feb. 8
Drop deadline: Last date to drop a course without receiving a grade	March 12
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript)	Mar. 13 – Apr. 12
Holidays and University Closures (Good Friday):	Apr. 2

TEXTBOOK

Richard D. De Veaux, Paul F. Velleman, David E. Bock, Augustin M. Vukov, and Augustine Wong, *Stats: Data and Models*, 3rd Canadian Edition, Pearson, 2018.

Available at: <u>https://www.pearson.com/store/p/stats-data-and-models-third-canadian-edition/P100002663496</u>

Material from the first five parts will be covered. A detailed list of topics will be available on the course website.

Please Note:

- You do *not* have to buy the MyLab version(s) of the textbook. MyLab will provide you with additional practice questions and as such it may be useful for some students. It is generally recommended but it is *not* required.
- The length of access and the price differ across different electronic versions of the textbook:
 - o eText plus MyLab, Access: 2 Years, Price: \$95, ISBN 9780134794594
 - o eText only, Access: Perpetual, Price: \$99, ISBN 9780134809861
 - o eText only, Access: <u>180 days</u>, Price: \$69, ISBN 9780134809878