York University Faculty of Liberal Arts & Professional Studies Department of Economics

AP/ECON 2500 3.0 E

Introductory Statistics for Economists I

Fall 2020 Course Outline

Course Instructor Contact:

Instructor: David K. Lee, Ph. D.

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<u>Virtual Course Consultation Hours</u>: Fridays/Saturdays 10:00-11:00 (Zoom connection information

will be available through Moodle)

Course Web Site: Moodle

Calendar Course Description / Prerequisite / Co-Requisite:

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 normal distribution, correlation, and the design and interpretation of hypothesis tests. 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/MATH 2500 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.

Lecture Time and Location

Lecture:

- Online delivery format.
- Course Materials will be delivered on Moodle every **Thursday 7:00 pm 10:00 pm**.
- This is an online course. The entire course, including the submission of assignments, participation/discussion and test-taking, will take place on the course's Moodle.

Teaching Assistants: N/A

Organization of the Course

This course is an online lecture delivery format. Lectures will be delivered through lecture notes and audio files and/or virtual lectures with Zoom. Office hours will be held in a virtual space with Zoom. All students must have a Zoom account.

Technical requirements for taking the course:

A computer with microphone and webcam, and a high speed and reliable internet connection, and/or a smart device with these features. These technical features are required for students in order to fully participate in the course. There are some live information sessions including Q & A that will be conducted through Zoom video conferencing, where students are expected to participate. Also, you may be required to appear on video for exams/tests proctoring purposes. If you are not comfortable with these requirements, you should not enroll in this section of the course.

Students shall note the following:

- Zoom is hosted on servers in the U.S. This includes recordings done through Zoom.
- If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.
- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

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

Student Guide to Moodle

Zoom@YorkU Best Practices

Zoom@YorkU User Reference Guide

Computing for Students Website

Student Guide to eLearning at York University

To determine Internet connection and speed, there are online tests, such as Speedtest, that can be run.]

Required Course Text / Readings

Statistics for Business and Economics, 13th Edition, James T McClave, P. George Benson, Terry Sincich. 2018, Pearson, ISBN-13: 9780134506593

Evaluation *

The grade for this course is composed of the mark received for each of the following components:

Type of Assessment	Percent/Weight	Date
Midterm Test I (Online, 120 minutes)	Higher mark 35%	Oct 8
Midterm Test II (Online, 120 minutes)	Lower mark 15%	Nov 19
Final Exam (Online, 180 minutes)	50%	Dec 9 - 23
TOTAL	100%	

The following conversions will be used in converting percentage grades to letter grades: 90-100 (A+), 80-89 (A), 75-79 (B+), 70-74 (B), 65-69 (C+), 60-64 (C), 55-59 (D+), 50-54 (D), 40-49 (E), 0-39 (F).

Problem sets will be posted in the course web site throughout the semester. Some of them may be solved in class. These problems will not be graded, however, I encourage you to work through them. It will help you understanding the course material and consequently, increase the probability that you will do well in the course. Practice may not always make perfect, but it's a good start.

Deferred Exam Policy:

There are no makeups for missed midterm exams. Anyone missing any one of the two midterm exams will automatically have their final exam reweighted to be worth 75% and the final grade will be calculated based on a 25% midterm and 75% final. If a student missed both midterms, the final grade will be calculated based on 0 % from midterm and 75% from the final.

<u>NO multiple deferrals allowed</u>: Students can defer only one of the three exams. If students defer more than one exams, the successive deferred exams will be marked zero.

<u>Deferring the Final Exam</u>: The deferred final exam policy will be applied only for those who completed all of the course requirements but the final exam. Students who do not complete one of the course requirements during the semester MUST attend the regular final exam session to complete the course. If a student were to miss a course requirement during the semester and has to defer the final exam as well then the student may submit a formal petition to the Faculty.

Topics to be covered:

Session	Topic	Reading and Activity	
01 Sep 10	Statistics, Data, and Statistical Thinking Methods for Describing Sets of Data	Ch 1, 2	
02 Sep 17			
03 Sep 24	Probability	Ch 3	
04 Oct 1	Random Variables and Probability Distributions	Ch 4	
05 Oct 8	Midterm 1 (Sessions 1 – 4 Covered)		
Reading Week Break			
06 Oct 22	Sample Distributions	Ch 5	
07 Oct 29	Inferences Based on a Single Sample: Estimation and Confidence Interval	Ch 6	
08 Nov 5	Inferences Based on a Single Sample: Tests of Hypotheses	Ch 7	

09 Nov 12	Inferences Based on Two Samples: Confidence	Ch 8	
	Intervals and Tests of Hypotheses		
10 Nov 19	Midterm 2 (Sessions 6 – 9 Covered)		
11 Nov 26	Design of Experiments and Analysis of Variance	Ch 9	
12 Dec 3	Categorical Data Analysis	Ch 10	
Final Exam: Dec 9 - 23			

New Information and Changes:

The schedule is subject to change –sometimes there are unexpected absences or we bog down on an issue. Check your class notes, or contact me for up-dated work schedules.

It may be very possible to make some adjustments of lectures and/or exams schedules. Students may also have handouts for the topics discussed in the class. It is students' responsibility to be aware of any policy (or schedule change), or to collect handouts from classes. If you miss classes, contact the instructor before or immediate after, and check if there is any policy change or handout distributed.

There is no excuse for not knowing course policies or schedule changes, or for not having handouts. Important Course Information for Students:

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage; http://www.yorku.ca/secretariat/policies/index-policies.html/

York's Academic Honesty Policy and Procedures/Academic Integrity Website

Academic Honesty and Integrity: Conduct that violates the ethical or legal standards of the University community or of one's program or specialization is subject to severe penalties. Students are responsible for understanding the nature and consequences of these offences, as contained in the Senate Policy on Academic Honesty, found on the York University Senate WEB page: http://www.yorku.ca/secretariat/policies/document.php?document=69

- ➤ Ethics Review Process for research involving human participants http://www.yorku.ca/secretariat/policies/document.php?document=94
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities http://www.yorku.ca/secretariat/policies/document.php?document=68
- Student Conduct Standards http://www.yorku.ca/oscr/standards.html
- Religious Observance Accommodation https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs