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

Fall 2024 Course Outline COURSE #: AP/ECON 2500 3.0 C COURSE TITLE: Introductory Statistics CLASS TIME: Tuesdays and Thursdays 2:30pm-4:00pm

1. Course Instructor Contact:

Prof. Ida Ferrara, Department of Economics <u>E-mail</u>: <u>iferrara@yorku.ca</u> (please include "ECON 2500" in the subject line) <u>Course Website</u>: eclass.yorku.ca (York eClass, login with your passport York account) <u>Office Hours</u>: in person or virtually by appointment

2. Course Description and Objective:

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.

Prerequisite: 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 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.

3. Required Course Text/Readings:

James T. McClave, P. George Benson, and Terry Sincich, *Statistics for Business and Economics*, 14th Edition, Pearson, 2022.

4. Weighting of Course:

Quizzes (8):	20%	(2.5% per quiz, throughout term)
Test 1:	15%	(Tuesday, October 1 st , 2024)
Test 2:	15%	(Tuesday, November 5 th , 2024)
Final Exam:	50%	(during the final examination period – December 5 th to 20 th)

Quizzes: There will be eight graded quizzes, each worth 2.5% of the final grade. The quizzes will be based on chapters 2 through 9 (one quiz per chapter), will be available the

day after the completion of the chapter (i.e., Wednesday or Friday), and will have to be completed in one hour from when they are first accessed.

Missing a Quiz: Under **NO** circumstances, the weight of a missed quiz will be transferred to another graded component of the course. Students failing to complete a quiz by the due date will receive a grade of zero for the missed quiz.

Missing a Test: There is **NO** make-up test for students missing test 1 or test 2 or both tests. If students missing a test provide a valid rationale for their absence, the weight of the missed test will be transferred to the final exam. If students missing a test fail to provide a valid rationale for their absence, they will receive a grade of zero for the missed test.

Missing the Final Exam: Students missing the final exam who provide a valid rationale for their absence will have the opportunity to write a deferred exam. There will be only one deferred exam, and students failing to write it will have to petition at the Faculty level.

5. Additional Information:

Students are expected to check the York eClass course website (link found at <u>http://eclass.yorku.ca</u>) regularly for updated course information.

Important Dates:

- Fall term begins Wednesday, September 4th, 2024
- First class of the course: Thursday, September 5th, 2024
- Fall Reading Week: October 12th to 18th
- Last class of the course: Tuesday, December 3rd, 2024
- Last date to drop course without receiving a grade: Friday, November 8th, 2024 (however, if students withdraw between November 9th and December 3rd, they will receive a "W" on their transcript)

COURSE TOPICS

- Statistics, Data, and Statistical Thinking (Chapter 1)
- Methods for Describing Sets of Data (Chapter 2)
- Probability (Chapter 3)
- Random Variables and Probability Distributions (Chapter 4)
- Sampling Distributions (Chapter 5)
- Single-Sample Inference: Estimation with Confidence Intervals (Chapter 6)
- Single-Sample Inference: Tests of Hypotheses (Chapter 7)
- Two-Sample Inference: Confidence Intervals and Tests of Hypotheses (Chapter 8)
- Design of Experiments and Analysis of Variance (Chapter 9)
- Categorial Data Analysis (Chapter 10)

6. Course Policies:

Please review the course policies in this section. All students are expected to familiarize themselves with the following information:

- Student Rights & Responsibilities
- Academic Accommodation for Students with Disabilities

Academic Integrity

Academic integrity is a fundamental and important value of York University. To maintain a fair and honest learning environment, you are responsible for understanding and upholding academic integrity in all courses and academic activities. You are encouraged to connect with reliable <u>on-campus resources</u> that support your coursework and academic honesty. To better understand the serious consequences of breaching academic honesty policies, familiarize yourself with the <u>Senate Policy on Academic Conduct</u>. You can learn more about upholding academic integrity in your courses by exploring <u>Guiding Principles for LA&PS</u> and <u>Academic Integrity for Students</u>.

Accessibility

York University is committed to creating a learning environment which provides equal opportunity to all members of its community. If you anticipate or experience any barriers to learning in this course, please discuss your concerns with your instructor as early as possible. For students with disabilities, contact <u>Student Accessibility Services</u> to coordinate academic accommodations and services. Accommodations will be communicated to Course Directors through a Letter of Accommodation (LOA). Accommodations for tests/exams normally require three (3) weeks (or 21 days) before the scheduled test/exam to arrange.

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community and making reasonable and appropriate <u>accommodations to</u> <u>adherents for observances of special significance</u>. Should any of the dates specified in this syllabus for course examinations, tests, or deadlines conflict with a date of religious significance, please contact the instructor within the first three (3) weeks of class. If the date falls within the formal examination periods, you must complete and submit a <u>Religious</u> <u>Accommodation for Examination Form</u> at least three (3) weeks before the start of the exam period.

Intellectual Property

Course materials are designed for use as part of this particular course at York University and are the intellectual property of the instructor unless otherwise stated. Third-party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian copyright law. Students may not publish, post on an Internet site, sell, or otherwise distribute any course materials or work without the instructor's express permission. Course materials should only be used by students enrolled in this course.

Copying this material for distribution (e.g., uploading material to a commercial third-party website) may lead to a charge of misconduct according to York's <u>Code of Student Rights</u> <u>and Responsibilities</u>, the <u>Senate Policy on Academic Conduct</u>, and/or legal consequences for copyright violations.

7. Student Support and Resources:

York University offers a wide range of student supports resources and services, including everything from writing workshops and peer mentorship to wellness support and career guidance. Explore the links below to access these on-campus resources:

- <u>Academic Advising</u> is available to provide students support and guidance in making academic decisions and goals.
- <u>Student Accessibility Services</u> are available for support and accessibility accommodation when required.
- <u>Student Counselling, Health & Wellbeing</u> offers workshops, resources, and counselling to support your academic success.
- <u>Peer-Assisted Study Sessions (PASS) Program</u> provides student study sessions for students to collaborate and enhance their understanding of course content in certain courses.
- <u>Student Numeracy Assistance Centre at Keele (SNACK)</u> supports students in courses involving math, stats, and Excel.
- <u>The Writing Centre</u> provides multiple avenues of writing-based support including drop-in sessions, one-to-one appointments, a Multilingual Studio, and an Accessibility Specialist.
- <u>Centre for Indigenous Student Services</u> offers a community space with academic, spiritual, cultural, and physical support, including writing and learning skills programs.
- <u>ESL Open Learning Centre (OLC)</u> supports students with building proficiency in reading, writing, and speaking English.
- <u>Learning Skills Services</u> provides tips for time management, effective study and learning habits, keeping up with coursework, and other learning-related supports.
- <u>Learning Commons</u> provides links to supports for time management, writing, study skills, preparing for exams, and other learning-related resources.
- <u>Roadmap to Student Success</u> provides students with timely and targeted resources to help them achieve academic, personal, and professional success.
- Office of Student Community Relations (OSCR) is responsible for administering the <u>Code of Student Rights & Responsibilities</u> and provides critical incident support.
- <u>Peer Mentorship</u> helps students transition through their first year by connecting them with upper-year students. The mentors can help find supports and resources. They also lead a community hub on campus.
- <u>goSAFE</u> is staffed by York students and can accompany York community members to and from any on-campus location, such as the Village Shuttle pick-up hub, parking lots, bus stops, or residences.

For a full list of academic, wellness, and campus resources visit <u>Student Support &</u> <u>Resources</u>.