

York University
Faculty of Liberal Arts & Professional Studies
Department of Economics
Winter 2020

AP/ECON 3500 3.0 M : Introductory Mathematical Statistics for Economists

Course Webpage: <https://moodle.yorku.ca/>

Course Instructor/Contact:

Name: Shafkat Ali
Office: VH 1057
Office Hours: W 16:30-17:30
Email: shafkat@ yorku.ca

LectureTime and Location:

Lecture: M W 14:30-16:00

Location: HNE 037

Prerequisite / Co-requisite:

AP/ECON 1530 3.00, AP/ECON 1540 3.00, and AP/ECON 2500 3.00.

Course Description: An introduction to mathematical statistical analysis. Includes distributions of random variables and of functions of random variables, conditional probability, independence, special distributions, moment-generating functions, the central limit theorem.

Weighting of Course:

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| <u>Evaluation:</u> Midterm | 40% |
| Final | 60% |

Missed exams/Tests:

There will be no make-ups for the midterm exam. If, for some reason students miss the midterm, the weight will be transferred to the final. The deferred exam for the final exam will be granted **only for medical reasons**. In such cases students should submit a deferred exam application together with the supporting documents (attending physician's statement) to the economics department to my attention. The date and time of the deferred exam will be set at a later date. Students who may require further extensions or accommodation will have to submit a formal petition to the Faculty.

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.). 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.)

Course Text:

Probability and Statistical Inference, 9th edition; authors: Robert V. Hogg, Elliot A. Tanis and Dale L. Zimmerman; publisher Pearson

Organization of the Course (Topics):

Chapter 1: Probability: 1.1, 1.2, 1.3, 1.4, 1.5

Chapter 2: Discrete Distributions: 2.1, 2.2, 2.3, 2.4, 2.6

Chapter 3: Continuous Distributions: 3.1, 3.2, 3.3

Chapter 4: Bivariate Distributions: 4.1, 4.2, 4.3, 4.4, 4.5

Chapter 5: Distributions of Functions of Random Variables: 5.1, 5.2, 5.3, 5.4, 5.6, 5.8

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>

Important Dates

Winter Term 2020

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| Last date to add a course without permission of instructor | Jan. 19 |
| Last date to add a course with permission of instructor | Feb. 3 |
| Last date to drop a course without receiving a grade | March 13 |
| Course Withdrawal Period | March 14-April 5 |