

Faculty Liberal Arts and Professional Studies

Department of Economics

Course: AP/ECON 4140 3.0A

Course_Webpage: <https://moodle.yorku.ca>

Term: FALL TERM 2022

Prerequisite : Econ 3210 or Econ 3500 or equivalent

Course Instructor

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Office hours: TBA

Time and Location

Lectures R 11:30- 2:30 VH 3006

Course Description

This course is an introduction to financial econometrics for students who have taken Econ 3210 or Econ 3500. Background knowledge of finance is not required.

The objective of the course is to explain, in simple terms, the use of selected statistical methods and econometric models in finance.

The content of the course includes simple static and dynamic models of financial returns, the Sharpe ratio, the CAPM regression model, elements of option pricing, the Value-at-Risk (VaR), and the ARCH model. All theoretical concepts introduced in this course will be illustrated in class by various empirical examples. Additional examples will be assigned as homeworks. Students are encouraged to work and submit their assignments in teams of no more than 3 participants. The assignments will require only basic programming skills. In class, students can learn SAS, and use the SAS codes available on the course website.

The outcomes of this course are: 1. know and understand the essential concepts in Financial Econometrics 2. understand the properties of financial data. 3. estimate basic dynamic models for Finance 4. interpret a computer output of model estimation 5. develop basic programming skills

Course Text

Required:

D. Ruppert, *Statistics and Finance*, Springer 2004.

Suggested for complementary readings:

1. lecture notes at <https://moodle.yorku.ca>.

2. D. Ruppert, D.S. Matteson, *Statistics and Data Analysis for Financial Engineering with R Examples*, 2nd ed. 2015 Springer

Evaluation

1. Mid-term exam 30% , date of exam: October 20
2. Final exam 49% (date to be determined)
3. Assignments 21% questions are available on Moodle with the data and SAS codes. The solutions and answers to questions need to be handed in on October 06, November 10 and December 01. **The computer code and output account for 30% of the grade and have to be included in the assignment submission**

Grading, Assignment Submission, Lateness Penalties and Missed Tests

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.)

(For a full description of York grading system see the York University Undergraduate Calendar - <https://calendars.students.yorku.ca/>)

Assignment Submission: Proper academic performance depends on students doing their work not only well, but on time. Accordingly, assignments for this course must be received on the due date specified for the assignment. Assignments are to be printed out and handed in class. The computer output is an essential component of the assignment, which has to be provided along with the typed or hand-written answers to questions. **The computer code and output account for 30% of the grade and have to be included in the assignment submission**

Lateness Penalty: Assignments received later than the due date will be penalized by one-half letter grade (1 grade point) per day that assignment is late. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc, will require supporting documentation (e.g., a doctor's letter).

Missed Tests: Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g., doctor's letter) will be allowed to write a make-up test on a date determined by the Course Instructor. A deferred or deferred exam will not be offered. The weight of the midterm will not be transferred to the final. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

IMPORTANT COURSE INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents) - <http://secretariat-policies.info.yorku.ca/>

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical,

- systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

Course ADD/Drop Deadlines

	Fall Term 2022 (F)	Winter Term 2023(W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 20	Jan. 22
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 2	Feb. 3
Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 12	March 18
Course Withdrawal Period (withdraw from a course and receive a grade of “W” on transcript – see note below)	Nov. 12 - Dec. 7	March 18 - Apr. 11

****Policy and Guidelines on Withdrawn from Course:** <http://secretariat-policies.info.yorku.ca/policies/withdrawn-from-course-w-policy-and-guidelines/>
<https://registrar.yorku.ca/enrol/dates/fw19>