

DEREE COLLEGE SYLLABUS FOR: FN 4955 FINANCIAL ECONOMETRICS II

(Updated Fall 2021)

UK LEVEL: 6
UK CREDITS: 15
US CREDITS: 3/1/3**PREREQUISITES:**

AF 2007 Financial Accounting
EC 1000 Principles of Microeconomics
EC 1101 Principles of Macroeconomics
EC/FN 3046 Investment Analysis and Management I
FN 2128 Principles of Finance
FN 3213 Corporate Finance
FN 3437 Financial Econometrics I
MA 1008 College Algebra
MA 2021 Applied Statistics

CATALOG DESCRIPTION:

Advanced econometric methods and applications in finance. Multivariate models, quantile regression, panel data regression and binary/categorical dependent variable methodologies will be discussed and applied.

RATIONALE:

Econometric methods are integral part of economic and finance theory and the driving force in the growing fields of economic/financial policies and global financial markets. Given their importance, students need to develop the ability to model real life problems, quantify them and interpret results so as to evaluate policy directions and create forecasts. This course aims to provide students with the advanced tools and the theoretical background in order to deal effectively with problems and issues raised within the area of finance.

LEARNING OUTCOMES:

After taking this course, students should be able to:

1. Formulate an economic hypothesis in a form suitable for econometric testing.
2. Apply econometric methods to obtain numerical estimates of coefficients in economic relationships.
3. Construct an appropriate set of criteria to establish whether a theory is consistent with facts.
4. Carry out collection of data, specification of a model, testing, and discussion of economic implications.
5. Apply econometric techniques in the context of real world empirical problems

METHOD OF TEACHING AND LEARNING:

In congruence with the learning and teaching strategy of the college, the following tools are used:

- Classes consist of lectures, problem-solving sessions, and class discussions of recent articles in economic journals assigned by the instructor.
- Laboratory practice sessions.
- Office hours: students are encouraged to make full use of the office hours of their instructor, where they can ask questions and go over lecture material.
- Use of blackboard, where instructors post lecture notes, assignment instructions, timely announcements, as well as

	additional resources.						
ASSESSMENT:	<p>Summative:</p> <table border="1"> <tr> <td>1st assessment: Three group assignments (up to 1000 words each)</td> <td>60%</td> </tr> <tr> <td>2nd assessment: Final written examination: two-hour, in-class, closed book</td> <td>40%</td> </tr> </table> <p>Formative:</p> <table border="1"> <tr> <td>Practice problem sets</td> <td>0%</td> </tr> </table> <p>The formative assessment prepares students for the examination and ensures that students are actively engaged during the term.</p> <p>The three assignments test all Learning Outcomes.</p> <p>The final examination tests Learning Outcomes 1, 2, and 3.</p> <p>The first assessment tests all Learning Outcomes. Grade averaging applies.</p> <p>The final grade for this module will be determined by averaging all summative assessment grades, based on the predetermined weights for each assessment. If students pass the comprehensive assessment that tests all Learning Outcomes for this module and the average grade for the module is 40 or higher, students are not required to resit any failed assessments.</p>	1 st assessment: Three group assignments (up to 1000 words each)	60%	2 nd assessment: Final written examination: two-hour, in-class, closed book	40%	Practice problem sets	0%
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2 nd assessment: Final written examination: two-hour, in-class, closed book	40%						
Practice problem sets	0%						
INDICATIVE READING:	<p>REQUIRED READING:</p> <p>Brooks, C. (2019). Introductory Econometrics for Finance. Cambridge University Press, 4th edition.</p> <p>RECOMMENDED READING:</p> <p>Fabozzi, Frank, Focardi Sergio, Svetlozar Rachev and Bala G. Arshanapalli. The Basics of Financial Econometrics. Wiley & Sons, 2014.</p> <p>Cuthbertson, K. and Nitzche, D. (2004). Quantitative Financial Economics. Wiley & Sons, 2nd ed.</p> <p>Other library sources, including journal articles accessed through the library databases as recommended by the instructor.</p>						
INDICATIVE MATERIAL: (e.g. audiovisual, digital material, etc.)	<p>REQUIRED MATERIAL: N/A</p> <p>RECOMMENDED MATERIAL: N/A</p>						
SOFTWARE REQUIREMENTS:	Excel, Word, financial databases, econometric software (e.g. Eviews, Stata)						
COMMUNICATION REQUIREMENTS:	Use of appropriate academic conventions as applicable in oral and written communications.						

WWW RESOURCES:	www.fred.stlouisfed.org www.bloomberg.com www.yahoofinance.org
INDICATIVE CONTENT:	<ol style="list-style-type: none">1. Review of the Multiple Regression Model and Assumptions and Violations2. Estimation Methods: ML, IV, 2SLS, GMM3. Time Series Analysis: Stationarity, Cointegration, ECMs4. Quantile Regression5. Panel Data Regression: Fixed and Random Effects6. Binary/categorical Dependent Variables7. Switching Models