

EF4485: EXPERIMENTAL METHODS IN ECONOMICS/FINANCE

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Experimental Methods in Economics/Finance

Subject Code

EF - Economics and Finance

Course Number

4485

Academic Unit

Economics and Finance (EF)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

EF3440 Microeconomics for Business Strategy OR
EF3442 Intermediate Microeconomics
EF3450 Principles of Econometrics

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course will provide the student with the necessary tools understand current experimental literature including both laboratory experiment and field experiment. This course aims to provide students with: A solid understanding of the main principles and methodology of experimental economics/finance through discovery-based teaching and learning. A review of a selection of major subject areas that have been addressed by laboratory experiments and field experiments, so as to familiarize students with the design of these typical experiments and their key results. Applied knowledge and techniques to design and conduct laboratory experiments and field experiments in economics and finance. A guide to critically think about economics from the perspective of an empirical science. Key topics include the role of information in price formation in markets, auctions, role of fairness norms in bargaining, common resource utilization, issues of coordinating behaviour, experiment design, and field experiment in education and labour market. Students will get the chance to not only participate in many classroom-based experiments, but also design and carry out their own experiments after mastering the main principles of experimental economics.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Interpret the principles and methodology of experimental economics & finance	10	x	x	x
2	Explore and explain the rationale of the techniques (theoretical and econometrics methods) of designing and conducting experiments in economics and finance	20	x	x	x
3	Evaluate the design of a range of experiments in selected areas, such as market institutions, bargaining, coordination, public goods, information, asset markets and auctions, education economics, labor market, and industrial organization	30	x	x	x
4	Build the methodological connections between theory and experimental findings	20	x	x	x
5	Design and conduct simple laboratory experiments and field experiments and field experiments in economics and finance	20	x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Students will engage in formal lectures to gain knowledge in experimental methods in economics and finance	1, 2, 3, 4, 5	3 hours/week
2	Group project and presentation	Students will apply theories and experiment design techniques in the real world.	1, 2, 3, 4, 5	

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?	
1	Experiment research project and presentation	5	20	Design and conduct an experiment	Yes
2	Class Participation	2	5	Proactively learn the techniques of conducting experiment by participating	Yes
3	Assignments	4	15	-	Yes

Continuous Assessment (%)

40

Examination (%)

60

Examination Duration (Hours)

2

Assessment Rubrics (AR)**Assessment Task**

Experiment research project and presentation

Criterion

Creativity in Experiment Design, Writing and Data Analysis , Presentation

Excellent (A+, A, A-)

Outstanding Creativity in Experiment Design, Excellent Writing and Data Analysis, Outstanding Presentation

Good (B+, B, B-)

Good Creativity in Experiment Design, Good Writing and Data Analysis, Good Presentation

Fair (C+, C, C-)

Average Creativity in Experiment Design, Average Writing and Data Analysis, Average Presentation

Marginal (D)

Low Creativity in Experiment Design, Marginal Writing and Data Analysis, Marginal Presentation

Failure (F)

Poor Creativity in Experiment Design, Poor Writing and Data Analysis, Poor Presentation

Assessment Task

Class Participation

Criterion

By Participation

Assessment Task

Assignments

Criterion

Understanding of key concepts covered by the course

Excellent (A+, A, A-)

Excellent Understanding of key concepts covered by the course

Good (B+, B, B-)

Good Understanding of key concepts covered by the course

Fair (C+, C, C-)

Average Understanding of key concepts covered by the course

Marginal (D)

Marginal Understanding of key concepts covered by the course

Failure (F)

Poor Understanding of key concepts covered by the course

Assessment Task

Final Examination

Criterion

Understanding of key concepts covered by the course

Excellent (A+, A, A-)

Excellent Understanding of key concepts covered by the course

Good (B+, B, B-)

Good Understanding of key concepts covered by the course

Fair (C+, C, C-)

Average Understanding of key concepts covered by the course

Marginal (D)

Marginal Understanding of key concepts covered by the course

Failure (F)

Poor Understanding of key concepts covered by the course

Part III Other Information

Keyword Syllabus

Methodology of Experimental Economics. Market Experiments. Bargaining Experiments. Coordination Games. Public Goods. Information Experiments. Asset Markets Experiments. Auctions.

Reading List

Compulsory Readings

	Title
1	Charles Holt, Markets, Games and Strategic Behavior, current edition, Pearson.
2	Duflo, E., R., Glennerster, and M. Kremer. (2007) "Using Randomization in Development Economics Research: a Toolkit" Handbook of Development Economics Vol 4.

Additional Readings

	Title
1	Camerer, C., Behavioral game theory, current edition, New Age International.
2	Davis, D. D., Experimental economics, current edition, Princeton university press.
3	Friedman, D., & Sunder, S., Experimental Methods: A Primer for Economists, current edition, Cambridge University Press.
4	Joel Watson, Strategy: An Introduction to Game Theory, current edition, W. W. Norton & Co.
5	Kagel, J. H., & Roth, A. E, The handbook of experimental economics, current edition, Princeton University Press.
6	Athey, S., G.W., Imbens (2017) "The Econometrics of Randomized Experiments" Handbook of Economic Field Experiments, Vol 1.