

EF5211: PRICING THEORY

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Pricing Theory

Subject Code

EF - Economics and Finance

Course Number

5211

Academic Unit

Economics and Finance (EF)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to provide a framework of financial economics in finite models and to present the basic methodology to the valuation of financial securities.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Understand the basic framework of financial economics through studying the finite models.		x		
2	Master the cores of the equilibrium-based valuation and the arbitrage-based valuation.		x	x	
3	Apply the methods of arbitrage, optimality, and equilibrium to value securities, and to build financial models.		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	Describe the basic framework of financial economics through studying the finite models and taught students the cores of the equilibrium-based valuation and the arbitrage-based valuation so that students can apply the methods of arbitrage, optimality, and equilibrium to value securities, and to build financial models.	1, 2, 3 3 hours per week

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Coursework	1, 2, 3 40	-

Continuous Assessment (%)

40

Examination (%)

60

Examination Duration (Hours)

2

Assessment Rubrics (AR)

Assessment Task

Coursework (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Demonstrate the capability of applying the theories and models learned in the course to tackle some problem solving questions or exercises as assigned by the lecturer.

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Examination (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Demonstrate having good understanding of basic framework of financial economics and cores of the equilibrium-based valuation and the arbitrage-based valuation as well as the capability of applying the methods of arbitrage, optimality, and equilibrium to value various securities.

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Coursework (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Demonstrate the capability of applying the theories and models learned in the course to tackle some problem solving questions or exercises as assigned by the lecturer.

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Examination (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Demonstrate having good understanding of basic framework of financial economics and cores of the equilibrium-based valuation and the arbitrage-based valuation as well as the capability of applying the methods of arbitrage, optimality, and equilibrium to value various securities.

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Basic

Failure

(F) Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

The static model and state pricing, The equilibrium model, The multiperiod model, Equilibrium valuation in dynamic models

Reading List**Compulsory Readings**

Title	
1	Stanley R. Pliska, Introduction to Mathematical Finance, Blackwell Publishers Inc., (ISBN 1-55786-945-6).

Additional Readings

Title	
1	Nil