

Subject Code	AF6005
Subject Title	Microeconomic Foundations of Financial Economics
Credit Value	3
Level	6
Normal Duration	One semester
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	<p>The basic objectives of this subject are the following:</p> <ol style="list-style-type: none"> 1. To rigorously develop standard theories used in modern microeconomics 2. To demonstrate how these theories facilitate the analysis of optimal choice by economic agents making decisions, including in situations of uncertainty. 3. To expose students to existing research on formulation and manipulation of models involving economic problems and phenomena.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> 1. Understand how mathematical methods and rigorous analysis are used to formalize concepts and techniques of optimization and equilibrium in economics and other related disciplines. Evaluate, select from, and apply a range of research methodologies appropriate to their area of expertise. (Institutional Learning Outcomes: a and c) 2. Evaluate current developments in the finance and economics. (Institutional Learning Outcomes: a and c)
Subject Synopsis/ Indicative Syllabus	<p>The main aim of the course is to develop standard concepts and techniques used for analyzing decision-making and behavior in the context of economic and other related environments. This course comprises the following main topics:</p> <ol style="list-style-type: none"> 1. Mathematical Methods for Microeconomic Analysis 2. Preference and Choice, Utility Maximization 3. Competitive Equilibrium and Welfare 4. Choice Under Uncertainty, Game Theory 5. Game Theory 6. Information Economics 7. Special Topics in Financial Economics
Teaching/Learning Methodology	<p>The teaching approach will be a combination of lectures, problem sets, class discussions and research presentations. Students are expected to read the relevant text materials before lectures. Students are strongly to discuss their problems both during the lectures and outside the class. Also, students are strongly encouraged to discuss the problem sets with classmates. Students are encouraged to present their related research in class.</p>

Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				
			a	b			
	Continuous Assessment	50%					
	Problem Sets, Class Discussions	30%	√	√			
	Midterm exam	20%	√	√			
	Final exam	50%	√	√			
	Total	100%					
	<p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>The continuous assessment components include written report on problem set, questions as well as a mid-term test. Students are assigned with certain problem set questions and are required to explain and elaborate the answers in class and in written format. This will allow the instructors to observe and assess individual student's achievement of a particular learning outcome based on the coverage of the assigned problem set questions.</p> <p>Test and examination are used to gauge how much students have understood the overall subject contents and to assess students' achievement of all learning outcomes</p>						
Student Study Effort Expected	Class contact:						
	•	Lecture/workshop	39 Hrs.				
	Other student study effort:						
	•	Review of Lecture Notes and Reading Materials	48 Hrs.				
	•	Homework Problem Sets	30 Hrs.				
	Total student study effort		117 Hrs.				

**Reading List and
References**

Recommended

Andreu Mas-Colell, Michael D. Whinston, and Jerry R. Green (1995) *Microeconomic Theory*, Oxford University Press

Jean-Pierre Danthine, and J. B. Donaldson (2005) *Intermediate Financial Theory*, 2nd ed., Elsevier Academic Press

Yvan Lengwiler (2004) *Microfoundations of Financial Economics*, Princeton University Press,

Reference

Gary S. Becker (2007) *Economic Theory*, 2nd ed., Transaction Publishers

Geoffrey A. Jehle and Phillip J. Reny (2011) *Advanced Microeconomic Theory*, 3rd ed., Prentice Hall

Nancy Stokey, Robert Lucas and Edward Prescott (1989) *Recursive Methods in Economic Dynamics*, Harvard University Press

Walter Rudin (2006) *Principles of Mathematical Analysis*, 3rd ed., McGraw-Hill

Jensen, M. C., and W. H. Meckling, 1976, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics* 3, 305-360

Hart, O., and J. Moore, 1995, Debt and Seniority: An Analysis of the Role of Hard Claims in Constraining Management, *American Economic Review* 85, 567-585

Leland H. E., and D. H. Pyle, 1977, Informational Asymmetries, Financial Structure, and Financial Intermediation, *Journal of Finance* 32, 371-387

Kyle, A. S., 1985, Continuous Auctions and Insider Trading, *Econometrica* 53, 1315-1335.

Holmstrom B., 1979, Moral Hazard and Observability, *Bell Journal of Economics* 10, 74-91.

Akerlof, G. A., 1970, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, *Quarterly Journal of Economics*, 84, 488-500.