EDUTUS EGYETEM

Erasmus+

COURSE DESCRIPTION

Course name:	**Financial Markets**	**Course code:**	
Course type:			
Classes	2	**Creditpoints:**	5
Semester:	I.	**Training type**	full time
Training programme	The course aims to develop a student's understanding of the basic principles of finance. The course has a quantitative slant, and is designed to give a theoretical introduction to financial markets.		
Pre-requirements:	-		
Course leader:	Dr. Laki Balázs		
Lecturer:	Dr. Laki Balázs		
Department	Institute of Engineering		
Objectives:	The course looks at the way assets are valued in financial markets. It considers interest rates and the pricing of fixed-income bonds; stock market prices and returns; stock market risk and the influence of risk on the pricing of shares; and the characteristics and pricing of financial futures and options.		
Short description:	This course examines important issues in corporate finance from the perspective of financial managers who are responsible for making significant investment and financing decisions. The concept of net present value, suitably adapted to account for taxes, uncertainty, and strategic concerns, is used to analyze how investment and financing decisions interact to affect the value of the firm. The course covers topics that are important to decision-making in marketing, operations management, and corporate strategy. A large portion of the course covers capital budgeting, first without uncertainty, and then in the presence of uncertainty. Throughout, emphasis is placed on the interaction between (corporate and personal) taxes and the cost of capital. Topics covered in this context will include leasing and leveraged buyouts. The course also includes a treatment of dividend policy and capital market efficiency, as they relate to the value-maximization objective of the firm. While the course is not designed to dwell on abstraction, the basic theoretical underpinnings of the various topics are a prerequisite to competent analysis and intellectual discussion. We emphasize the development of problem-solving skills based on a good understanding of the business environment as opposed to pure theorizing or mindless numbers exercises. Because of the practical importance of the material and as an illustration of the relevant theory, we will discuss examples and cases.		
Competencies:	• Understand and explain stock market prices and returns; stock market risk and the influence of risk on the pricing of shares. • Understand and explain the effects on financial markets of exchange rates, interest rates and the pricing of bonds. • Understand and explain the characteristics and pricing of financial futures and options. • Integrate diverse and competing stakeholder perspectives into a unified decision model • Critically evaluate the output of quantitative simulation models • Make judgments about what assumptions to make when building or evaluating a model		

Course topics:	Week 1 Introduction Review of classical, analytic and quantitative corporate finance. "Quant-light" methods including peer analysis and regression. Common metrics including EPS and P/E Week 2 Math and probability refresher Convexity. Jensen's inequality. Simulating random numbers by CDF inversion. Historical simulation. Week 3 Modern risk measures Review of different risk measures: variance, value-at-risk and expected shortfall. Desirable properties of risk measures. Week 4 WACC and discounting Different discounting methods. Estimating WACC. Unlevering and relevering formulas. WACC approaches to capital structure. Week 5 Modelling business risks Uni- and multi-variable regression. Connection to maximum likelihood estimators Modelling business risks including cash flow waterfalls, capex (and impact of failing to make capex) and debt maturities. Modelling firm operations such as sales and EBITDA and handling seasonality. Week 6 Raising, allocating and returning capital Required capital Returns on capital. Cost of capital. Optimal leverage. Core theorems in corporate finance. Modigliani and Miller. No arbitrage arguments. Week 7 Sustainable modelling Sustainable growth. Sustainable capital structure. Data visualization techniques Presenting data visually. Common mistakes. Week 8 Debt capacity & distress Impact of leverage on the firm. Business disruption costs. Week 9 Dividends and share repurchases Pros and cons of dividends versus share repurchases. Technical impact on EPS, volume and price. Signalling effects. Week 10 Credit spreads The term and credit quality structure of credit spreads. Evolution of spreads over time. Week 11 Interest rate risk & FX rate risk Theories of the term structure. The fixed-floating debt decision. Approaches to forecasting FX rates, including various parity arguments. Fitting and simulating FX rate models.

Teaching methods:	Interactive lectures and seminars

Course requirements, and evaluation	Grading system -- 100 points total *mid-term exam (40 points) *final project (30 points for in-class presentation and 20 points for written report) *class participation (10 points) For the term paper (2,500-3,000 words), (1) Students will work on final project individually. (2) Students will submit a proposal on their dataset and analysis plan by the fourth class period. (3) Students will analyse their own dataset. (4) Students will present their final projects in class and write a comprehensive report of the data analysis.

Compulsory literature:	Class readers.

Recommended literature:	Essentials of Investments: Global Edition, Bodie, Kane and Marcus, 9th Edition Berk, Jonathan, and Peter DeMarzo, Corporate Finance, 2nd edition, Pearson, Boston, 2010. Jonathan Berk and Peter DeMarzo, Corporate Finance, Prentice Hall, 4th Edition. Hillier, Grinblatt and Titman, Financial Markets and Corporate Strategy, 2nd ed., McGraw-Hill, 2011.