

Course Unit Descriptor

<b>Study Programme:</b> Applied Mathematics (MB)		
<b>Course Unit Title:</b> Financial Economics 2		
<b>Course Unit Code:</b> MB37		
<b>Name of Lecturer(s):</b> Jasna Atanasijević		
<b>Type and Level of Studies:</b> Master Academic Degree		
<b>Course Status (compulsory/elective):</b> elective		
<b>Semester (winter/summer):</b> Winter		
<b>Language of instruction:</b> English		
<b>Mode of course unit delivery (face-to-face/distance learning):</b> Face-to-face		
<b>Number of ECTS Allocated:</b> 5		
<b>Prerequisites:</b> None		
<p><b>Course Aims:</b></p> <p>The course introduces basic concepts of modern financial economics, with special emphasis on asset pricing theory. It is designed to provide a basis for understanding the key results of financial economics from the point of view of microeconomic theory. The practical applications of theoretical concepts will be illustrated through a review of the key empirical facts related to the behaviour of market prices of financial instruments.</p>		
<p><b>Learning Outcomes:</b></p> <p>Students should master the basic principles of asset pricing, be able to solve theoretical problems, and to apply the theoretical concepts in practice.</p>		
<p><b>Syllabus:</b></p> <p>Financial markets and instruments; Risk and return - Basic empirical facts; Term structure of interest rates; No-arbitrage pricing under certainty: fixed-income instruments; No-arbitrage pricing under uncertainty: risky assets; Arrow-Debreu securities; Fundamental equation of asset pricing; Complete markets; Risk-neutral probabilities; Stochastic discount factor; Goods and preferences; Representation of preferences with utility function; Rational choice theory; Financial equilibrium under certainty; Expected utility function; Risk aversion and uncertainty aversion; Financial equilibrium under certainty; Efficient portfolios; Consumption-based Capital Asset Pricing Model (CCAPM); Capital Asset Pricing Model (CARM); Systemic and idiosyncratic risk; Arbitrage Pricing Theory (APT);</p>		
<p><b>Required Reading:</b></p> <ol style="list-style-type: none"> <li>1. Branko Urošević, <i>Finansijska ekonomija</i>, Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu (2008)</li> <li>2. John Cochrane, <i>Asset Pricing</i>, Princeton University Press (2005)</li> <li>3. Branko Urošević i Miloš Božović, <i>Operaciona istraživanja i kvantitativne metode investicija</i>, Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu (2009)</li> <li>4. Zvi Bodie, Alex Kane, Alan J. Marcus, <i>Osnovi investicija</i>, Data Status (2009)</li> <li>5. John Y. Campbell, Andrew W. Lo, A. Craig MacKinlay, <i>The Econometrics of Financial Markets</i>, Princeton University Press (1998)</li> </ol>		
<b>Weekly Contact Hours:</b>	<b>Lectures:</b> 3	<b>Practical work:</b> 1
<p><b>Teaching Methods:</b></p> <p>Lectures rely on conventional teaching methods, predominantly based on slideshow presentations. Students' ability to apply the theoretical concepts learned in the course is verified through homework assignments. The final exam is taken in</p>		

written form, and the students are required to demonstrate in-depth understanding of the course material.

**Knowledge Assessment (maximum of 100 points):**

<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Homework	40	Written exam	60