

Course Title	Financial Risk Management				
Course Code	AEF460				
Course Type	Elective				
Level	Bachelor (1 <sup>st</sup> Cycle)				
Year / Semester	4 <sup>th</sup> Year / 7 <sup>th</sup> or 8 <sup>th</sup> Semester				
Teacher's Name	TBA				
ECTS	6	Lectures / week	3 Hours / 14 weeks	Laboratories / week	None
Course Purpose and Objectives	<p>Financial Risk Management aims at providing the students with the most modern practices (models and technologies) in the finance and financial services industry to assess and manage various sets of risks. The course shows the students how to identify risk scenarios and quantify risk in conjunction with real world decision-making problems. It helps in evaluating any type of risk and also help students to understand the concept of risk management for any type of business (institutional, organizational, brand reputation, contractual, political, environmental and cultural considerations) in theory and practice, while being able to implement appropriate techniques.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Define the context of risk management, risk identification and prioritization;</li> <li>• Recognize and apply the risk management theories in practical real life in banking, insurance, financial services and business;</li> <li>• Identify, explain and simulate how to measure interest rate, market, credit, off-balance sheet, foreign exchange, sovereign, technology, operational and liquidity risks through practical problems and questions;</li> <li>• Compute and interpret the various risk management options, namely: hedging, insurance and diversification</li> <li>• Apply the Black-Scholes, Vasiek and Merton formula and the binomial tree for options valuation;</li> <li>• Apply Basel II/ III, and Solvency II calculations for bank and financial institutions capital adequacy;</li> </ul>				

	<ul style="list-style-type: none"> <li>• Critically analyse the Market and Credit Risk VaR and Losses, Volatility, Correlations and Copulas, Liquidity Risk;</li> <li>• Explain and apply risk transfer (contractual transfer, insurance, cost-benefit, securitization, derivatives, implementation of risk financing plans), risk controlling techniques, risk financing options, methods of risk monitoring, review, reporting and business continuity planning and management;</li> <li>• Critically debate the International and UK regulatory risk environment;</li> <li>• Apply scenario analysis and Stress Testing in Banking</li> <li>• Calculate the economic capital and RAROC for bank risk management.</li> </ul>		
Prerequisites	AEF135	Co-requisites	None
Course Content	<ul style="list-style-type: none"> <li>▪ This course deals with the way banks, insurance companies, pension funds and other financial institutions manage risk.</li> <li>▪ It covers credit risk, market risk, operational risk, liquidity risk and model risk. The Application of foreign currency and interest rate risk technics is of particular concern, apart from risk management control, review and monitoring.</li> <li>▪ Students will perform risk modelling and forecasting, using various techniques (checklists, risk mapping, risk matrices, physical inspection, organizational charts, control self-assessment, business impact analysis, flow charts, fault trees, HAZOPs, brainstorming workshops, internal and external benchmarking, risk ranking.</li> <li>▪ The nature of bank regulation and the Basel II and Basel III capital requirements for banks are examined and applied. Other topics include methods for monitoring volatilities and correlations, copulas, credit derivatives role in risk management and the calculation of economic capital and RAROC.</li> <li>▪ Recent developments and contemporary issues pertaining to the subject matter of the course.</li> </ul>		
Teaching Methodology	Face-to-face		
Bibliography	Hull John: Risk Management and Financial Institutions, Prentice Hall, (latest edition)		

	<p>Crouhy M., Galai D. and Mark R.: Risk Management, McGrawHill, (latest edition).</p> <p>Jorion, Phillipe: Value at Risk, McGraw Hill, (latest edition)</p> <p>Stult Rene: Risk Management &amp; Derivative, Thomson, (latest edition)</p> <p>Rene Doff. Risk management for insurers: risk control, economic capital, Solvency II. London: Risk Books, (latest edition).</p> <p>M.B. Miller Quantitative Financial Risk Management. JOHN WILEY &amp; Sons, Latest Edition.</p> <p>D. M. Chance. Basic Concepts of Financial Risk Management, World Scientific Book Chapters, in: Financial Risk Management An End User Perspective, chapter 4, pages 161-218, World Scientific Publishing Co. Pte. Ltd. Latest Edition.</p> <p>Additional Readings (Journals)</p> <p>Risk Management of COVID-19 by Universities in China, <a href="https://www.mdpi.com/1911-8074/13/2/36">https://www.mdpi.com/1911-8074/13/2/36</a></p> <p>ACCA F9, Latest Edition.</p>		
Assessment	<p>Examinations</p> <p>Class Participation and Attendance</p> <p>Assignments</p>	<p>60%</p> <p>10%</p> <p>30%</p> <p>100%</p>	
Language	English		