Annex No. 3		**Second Cycle Studies Course Programme**			
1.	Course Title	Financial Econometrics			
2.	Code	CFM521			
3.	Organizer of the study programme (university unit i.e. institute, chair, department)	Ss. Cyril and Methodius University in Skopje Faculty of Economics - Skopje Chair of Management			
4.	Level (first, second, third cycle)	Second Cycle Studies Course Programme Corporate Financial Management			
6.	Academic year	2022-2023 (winter/summer semester)	7.	Number of ECTS credits	6
8.	Professor	Prof. Vesna Bucevska, PhD			
9.	Preconditions for enrolment	Completed first cycle of studies with at least 240 credits and have basic knowledge of econometrics.			
10.	Course Objectives (Competencies): After taking this course, students should be able to: 1. Implement Generalized Autoregressive Models (GARCH Models) and Stochastic Volatility Models to represent the dynamic behavior of uncertainty. 2. Estimate time-varying correlations between financial returns. 3. use econometric models to test different financial hypotheses and models, such as testing the effectiveness of markets, assessing the risk of an individual stock by calculating its value at risk (Value at Risk), etc.				
11.	Course content: 1. Summary of the classical linear regression model (CLRM): assumptions, statistical inference, prediction, nonlinear models and further development and analysis of the CLRM; 2. Modeling and forecasting of univariate time series (AR, MA, ARMA and ARIMA, Exponential smoothing and Prediction using ARMA models); 3. Multivariate models (Simultaneous equations in finance, Structural, reduced and final form, Triangular systems, Procedures for evaluating systems of simultaneous equations, Vector autoregressive models (VAR) and VAR models with exogenous variables); 4. Modeling of long-term relationships in finance (examination of the existence of stationarity, cointegration, error correction models, methods for estimating parameters in cointegrated systems)				
12.	Learning methods: • Lectures, exercises, case studies, interactive teaching, quizzes, projects, films, supported by LCD and Power Point.				
13.	Total hours	6ECTS x 30 classes = 180 classes			
14.	Allocation of hours per activity	24+16+40+10+90 = 180 classes			
15.	Types of teaching activates	15.1.	Lectures		24 classes
		15.2.	Exercises (Seminars)		16 classes
16.	Other types of activities	16.1.	Project tasks		40 classes
		16.2.	Independent tasks		10 classes
		16.3	Home study		90 classes
17.		Grading method: 60+30+10 = 100 points			
	17.1.	Tests (Domain, Essay, Multiple choice exam, Case)			60 points
	17.2.	Project work presentation (written and			30 points

		oral), computer exercise		
	17.3.	Attendance and class participations		10 points
18.	Grading scale		less than 50 points	5 (five) (F)
			from 51 to 60 points	6 (six) (E)
			from 61 to 70 points	7 (seven) (D)
			from 71 to 80 points	8 (eight) (C)
			from 81 to 90 points	9 (nine) (B)
			from 91 to 100 points	10 (ten) (A)
19.	Preconditions for taking the final exam		Realized activities from points 15 and 16	
20.	Language		Macedonian (or English)	
21.	Evaluation method		Internal evaluation and survey	

	Literature					
		Compulsory literature				
		No.	Author	Title	Publisher	Year
	22.1.	1.	Brooks, C.	Introductory Econometrics for Finance, 4th ed.	Cambridge University Press	2019
		2.	Linton, O.	Financial Econometrics: Models and Methods	Cambridge University Press	2019
		3.	Tsay, R.S.	Analysis of Financial Time Series, 3rd ed.	John Wiley, New York	2010
22.		Additional literature				
		No.	Author	Title	Publisher	Year
	22.2.	1.	Asteriou, Dimitrios and S. G. Hall	Applied Econometrics, 4th ed	London : Red Globe Press	2021
		2.	Cox, D.R., Hinkley D.V. and Barndorff-Nielsen, O.E.,	Time Series Models in Econometrics, Finance and other Fields	Chapman and Hall, London	2020
		3.	Mills, C.T.	The Econometric Modelling of Financial Time Series, 3rd ed.	Cambridge University Press, Cambridge	2008