TIME SERIES ANALYSIS

1	Course Title:	TIME SERIES ANALYSIS	
2	Course Code:	EKO5101	
3	Type of Course:	Compulsory	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	7.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	No	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. ERKAN IŞIGIÇOK	
15	Course Lecturers:	Prof. Dr. Erkan IŞIĞIÇOK	
16	Contact information of the Course Coordinator:	E-posta : eris@uludag.edu.tr Telefon: 0 224 29 41101 Adres: Uludağ Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Ekonometri Bölümü,16059, Görükle/Bursa.	
17	Website:		
18	Objective of the Course:	The aim of the course is to teach the basic concepts and models for time series analysis.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To be able to analyze time-series graphs with different structures.
		2	To be able to analyze the stationary and nonstationary stochastic processes.
		3	To be able to know the relationship between time-series approach to econometric approach.
		4	To be able to define autoregressive moving average processes.
		5	To be able to use the Box-Jenkins approach.
		6	To be able to apply analysis of Granger Causality and interpret the findings.
		7	To be able to apply unit root tests.
		8	To be able to apply ARIMA models and causal models to the time series data.
		9	
		10	
21	Course Content:		

Course Content:

Week	Theoretical	Practice
1	Philosophical and Statistical Sense Causality	
2	Econometric Approach and Time Series Analysis Approach	

3	Factors Affecting the Time Series	
4	Theoretical Framework for Analysis of Time Series	
5	Theoretical Framework of Causality Tests	
6	Data Entry to Eviews Package Program and Features of The Commands	
7	Investigation of the Relationships Between Variables with Causality Tests and Eviews Practises	
8	Time-Series Patterns and Eviews Practises	
9	Stationary and Nonstationary Stochastic Processes	
10	Stationarity Analysis with correlogram and Eviews Practises	
11	Stationarity Analysis with Unit Root Test and Eviews Practises	
12	AR Model Estimation with Box-Jenkins Method and Eviews Practises	
13	MA Model Estimation with Box-Jenkins Method and Eviews Practises	
14	ARIMA Model Estimation with Box-Jenkins Method and Eviews Practises	

22	Textbooks, References and/or Other Materials:	1. Erkan IŞIĞIÇOK, Zaman Serilerinde Nedensellik Çözümlemesi, Uludağ Üniversitesi Basımevi, 1994. 2. Mustafa SEVÜKTEKİN ve Mehmet

23	Assesment	
Midterm Exam	0	0.00
Home work-project	4	30.00
Total	5	100.00
Success Grade		
Total		100.00

Course

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	3.00	42.00
Homeworks	4	10.00	40.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	55.00	55.00
Total Work Load			179.00
Total work load/ 30 hr			5.97
ECTS Credit of the Course			7.00

24 ECTS / WORK LOAD TABLE

25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	2	4	4	5	4	4	2	5	5	3	4	4	0	0	0	0
ÖK2	4	4	3	4	4	5	2	4	5	4	5	4	0	0	0	0
ÖK3	2	5	4	2	3	5	1	5	5	4	5	4	0	0	0	0

ÖK4	2	5	3	4	3	4	2	4	4	4	4	2	0	0	0	0
ÖK5	2	5	2	2	3	3	2	3	2	3	3	2	0	0	0	0
ÖK6	2	4	2	3	3	5	4	5	5	4	5	4	0	0	0	0
ÖK7	3	3	2	4	4	4	4	4	3	3	3	3	0	0	0	0
ÖK8	3	5	3	5	4	5	4	4	5	4	5	4	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**