STATISTICAL APPLICATIONS IN FINANCE

1	Course Title:	STATISTICAL APPLICATIONS IN FINANCE	
2	Course Code:	IFY5304	
3	Type of Course:	Compulsory	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	2	
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. Lale Karabıyık	
15	Course Lecturers:	Prof. Dr. Ayşe OĞUZLAR	
16	Contact information of the Course Coordinator:	lale@uludag.edu.tr 0224 294 11 56	
17	Website:		
18	Objective of the Course:	The objective of this course is to teach statistical applications in finance.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To be able to comprehend basic statistical concepts.
		2	To be able to understand risk concept and value at risk.
		3	To be able to draw and interpret financial graphs.
		4	To be able to apply probability theory in finance
		5	To be able to use simple and multiple regression models
		6	To be able to make interpolation.
		7	To be able to use advanced statistical techniques that are used in financial field.
		8	To be able to make data mining analyses in finance
		9	
		10	
21	Course Content:		

	Course Content:	
Week	Theoretical	Practice
1	Averages	
2	Risk concept and variability measures	

3	Value at risk	
4	Graphics (histogram, box-whiskers, scatter plot)	
5	Indices and their types	
6	Financial proportions	
7	Probability theory and random variables	
8	Normal distribution	
9	Normality tests and graphics	
10	Simple and multiple regression	
11	Time series analysis and trend	
12	Interpolation	
13	Advanced statistical techniques in finance	
14	Data mining in finance	

22	Textbooks, References and/or Other Materials:	1.Prof. Dr. Özer Serper, Uygulamalı İstatistik, Ezgi Kitabevi, Bursa, 2010. 2. Prof. Dr. Necmi Gürsakal, Çıkarımsal İstatistik, Dora, Bursa, 2009. 3. Prof. Dr. Mustafa Aytaç, Matematiksel İstatistik, Ezgi Kitabevi, Bursa, 2004. 4.Lale Karabıyık ve Adem Anbar, Sermaye Piyasası ve Yatırım Analizi, Ekin Kitabevi, Bursa, 2010.
23	Assesment	

Quiz	0	0.00
Final Exam	1	60.00
Contribution of Term (Year) Learning Activities to		40.00
Contribution of Final Exam to Success Grade		60.00
Measurement and Evaluation Techniques Used in the		

24 ECTS / WORK LOAD TABLE

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	6.00	84.00
Homeworks	2	15.00	30.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	2	20.00	40.00
Final Exams	1	15.00	15.00
Total Work Load			211.00
Total work load/ 30 hr			7.03
ECTS Credit of the Course			7.00

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	3	4	4	3	4	3	4	3	4	5	3	4	0	0	0	0
ÖK2	3	4	3	4	4	3	3	4	3	4	3	5	0	0	0	0
ÖK3	5	3	4	3	3	3	3	3	4	4	3	4	0	0	0	0
ÖK4	4	4	4	4	4	3	3	3	3	3	2	3	0	0	0	0

ÖK5	3	5	4	3	3	3	3	4	3	3	3	5	0	0	0	0
ÖK6	4	4	3	3	4	4	4	4	3	3	4	4	0	0	0	0
ÖK7	3	3	3	4	4	4	3	3	4	3	3	3	0	0	0	0
ÖK8	4	5	3	3	3	3	3	3	3	4	4	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**			