AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Finance Mathematics								
Course Code	FEK515		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	125 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To teach mathematical analysis and its uses in the field of economics.								
Course Content	Derivatives, definite and indefinite integral and mathematical analysis.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	CHİANG, A., C., (2010). Matematiksel iktisadın Temel Yöntemleri, Çeviren: Muzaffer Sarımeşeli, Osman Aydoğuş, Gazi Büro Kitabevi

Week	Weekly Detailed Course Contents	
1	Theoretical	Economical, linear and quadratic relations
2	Theoretical	Equilibrium analysis and partial equilibrium analysis I
3	Theoretical	Equilibrium analysis and partial equilibrium analysis II
4	Theoretical	General equilibrium matris algebra
5	Theoretical	Change ratio, differentiation, methods of differentiating I
6	Theoretical	Change ratio, differentiation, methods of differentiating II
7	Theoretical	Partial derivative
8	Intermediate Exam	Midterm Exam
9	Theoretical	Derivative and elasticity
10	Theoretical	Limit, uncertainty in limit
11	Theoretical	Volume, definite integral and its propeties
12	Theoretical	Calculation of indefinit integral, properties and methods to integrate
13	Theoretical	Area and arc calculations through definite integral
14	Theoretical	Volume calculation through definit integral
15	Theoretical	Partial derivation and method of variating variable
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	3	98
Midterm Examination	1	10	1	11
Final Examination	1	14	2	16
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be able to use mathematical techniques in economics
2	To be able assess economical relations
3	To be able to analyze economical events
4	To be able to explain the concepts of time value of money

5	To be able to make profit accounts

Programme Outcomes *(Econometrics Master)*	
1	Understanding the concept of econometric
2	Ability to estimate econometric models
3	Test to the estimated reliability of the econometric model
4	Learning time series analysis
5	Recognition of financial assets and analysis that estimates the decisions of economic units
6	Be able to use econometric methods developed specifically for analysis of financial data
7	To be able to use computer programs needed in the field financial economics as well as information and communication technologies in advanced levels
8	Provision of the information that will be base for the econometric applications on money theories, theories of international trade and finance
9	Considering a scientific research,to be able to make a profound literature research, analysis,estimations and reporting findings in a scientific work

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	3	1	4	4	4
P2	3	2	3	3	3
P3	2	2	4	4	5
P4	3	2	4	2	3
P5	3	3	4	5	4
P6	3	3	3	3	3
P7	2	2	4	4	4
P8	3	3	3	3	2
P9	4	3	4	3	5