AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Mathematics For Economics II						
Course Code	İKT108		Couse Level	First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	98 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To teach how to implement economic cases by using mathematical methods and interpret what results mean economically.						
Course Content	Dynamism and Integration: The Indefinite Integral, Area and Definite Integrals, Partial Integration, Various Applications of Integration, Differential Equations, Financial Issues: Interest Rates and Present Value, Multivariate Functions, Comparative Statics, Multivariate Optimization, Constrained Optimization, Matrix and Vector Algebra, Determinants and Matrices.						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods		Explanation (Presentation), Individual Study					
Name of Lecturer(s)	Lec. Yılmaz ERDEM						

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Sydsaeter K. ve Hammond P. (2004), Ekonomik Analiz İçin Temel Matematik, Turhan Kitabevi, Ankara
2	Chiang, A. C. (2003), Matematiksel İktisadın Temel Yöntemleri, Teori Yayınları, Ankara

Week	Weekly Detailed Course Contents	
1	Theoretical	Antiderivatives and the Rules of Integration, Integration by Substitution
2	Theoretical	Finding Areas by Integration, the Definite Integral
3	Theoretical	Integration by Parts
4	Theoretical	Improper Integrals and Applications to Integral
5	Theoretical	Differential Equations
6	Theoretical	Financial Issues: Interest Rates and Present Value I
7	Theoretical	Financial Issues: Interest Rates and Present Value II
8	Intermediate Exam	Mid-term exam
9	Theoretical	Functions of Several Variables
10	Theoretical	Functions of Several Variables
11	Theoretical	Comperative Static
12	Theoretical	Optimisation of Functions of Several Variables
13	Theoretical	Constraint Optimisation
14	Theoretical	Matrixes and Vectors
15	Theoretical	Matrixes and Determinants
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Individual Work	10	0	1	10
Midterm Examination	1	8	1	9
Final Examination	1	8	1	9
			Total Workload (Hours)	98
			[Total Workload (Hours) / 25*] = **ECTS**	4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to use integration as a mathematical and an economic tool
2	To be able to constitute basic knowledge about financial issues
3	To be able to apply functions of several variables to economic conditions and to make optimisation of functions of several variables
4	To be able to apply matrixes and vectors to systems of equetions with functions of several variable
5	To be able to make mathematical explanations of economic variables

Programme Outcomes *(Economics)*

1	To be able to understand and interprent the concepts, theories and methds of basic economics
2	To be able to apply mathematical, statistical and econometric analysis tools to economic problems
3	To be able to interpret the structure and characteristics of the markets in the economy by understanding the current economic events
4	To be able to define the role of innovation, creativity and technology concepts in the dynamic global economy.
5	To be able to prepare projects and to gain creativity skills
6	To be able to analyze macro and micro ekonomic activities.
7	To be able to adapt the philosophy of lifelong learning

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	4	4	5	4	4
P2	3	5	4	3	3
P3	4	4	3	4	4
P4	3	4	5	3	4
P5	4	4	4	4	4
P6	3	3	4	4	4
P7	4	4	3	3	4