AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Business Mathematics I						
Course Code	İŞLT105		Couse Level	First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	102 *(Hours)*	Theory	3	Practice	0	Laboratory	0

Objectives of the Course	The purpose of the course is to develop quantitative competencies and analytical thinking skills of the business students. Businesses are constantly confronted with decision-making problems. Mathematical methods are used in evaluation of different alternatives. In order that these methods can be applied and assist decision making, fundamental mathematical knowledge and competencies should be acquired. In order to find solutions to the problems in the field of business, functions,graphs and derivatives will be emphasized. Following the overview of the functions consist of decision-making variables, applied examples in the field of business will be coveyed to the students.In short the course aims to enhance quantitative skills and abilities of the students and allow that this mastery be applied to decision making problems and various areas of business.
Course Content	Building the fundamental mathematical background that would be used in business decision-making, evaluation of the alternatives and identification of optimum option and developing analytical thinking skills of students.
Work Placement	N/A
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, 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	Edward. T. DOWLING, İşletme ve İstatistik İçin Matematiksel Yöntemler, Çev. Ö. F. Çolak, M. YILDIRIMOĞLU, Schaum's Outlines, Nobel Yayın Dağıtım.

Week	Weekly Detailed Course Contents	
1	Theoretical	Science, mathematics and analytical thinking in terms of operational significance, the use of decision-making problems, the basic concepts of mathematics
2	Theoretical	Numbers, Exponents and roots, factorization
3	Theoretical	Equations and their solutions, linear equations
4	Theoretical	Functions, inverse function, composite function
5	Theoretical	Graphs of quadratic functions, rational functions and graphs of partial functions
6	Theoretical	Exponential and logarithmic functions, logarithm
7	Theoretical	Limits and Continuity
8	Theoretical	The use of derivative, derivation rules
9	Intermediate Exam	Midterms
10	Intermediate Exam	Midterms
11	Theoretical	Successive differentiation, maximum and minimum points, decreasing and increasing intervals
12	Theoretical	Business applications of the derivative
13	Theoretical	Profit maximization, cost minimization
14	Theoretical	Partial derivatives
15	Theoretical	Optimization methods

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	3	39
Individual Work	13	0	2	26
Midterm Examination	1	15	1	16

Final Examination	1	20	1	21
		Total Workload (Hours)		102
		[Total Workload (Hours) / 25*] = **ECTS**		4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to enable to support to the business decision-making problems.
2	To be able to enhance the quantitative skills and knowldege.
3	To be able to Acquire and enhance the analytical thinking skills.
4	To be able to enable to essential mathematical background that can be utilized in the areas such as research and evaluation.
5	To be able to gain competence on the use of derivatives and integrals on business problems.

Programme Outcomes *(Human Resources Management)*

1	Having adequte scientific knowledge of Human Resources Management, basic business concepts and other social sciences
2	Thinking critically and analytically
3	Having knowledge of communication and information technologies
4	In-depth understanding of the research process and application of a range of research techniques into studies, researches and projects
5	In-depth understanding of usage of Human Resources Management and other social sciences theoretical and applied knowledge together.
6	Ability to interpret basic Business concepts from Human Resource Management perspective
7	Ability to implement basic HRM responsibilities in institutions such as HR Planning and staffing, labor relations, occupational healthy and safety, training planning, performance and rewards management, career planning, employment and interview techniques and legal HR issues
8	Implementing quality process approach into HRM process by considering institutional development, internal and external customer satisfaction; in case of need, having sense of responsibility making contribution for problem solving and continuous development and process excellence ability by problem identification, goal setting, reorganisation and change management skills
9	Management of resources and assets by considering budgetary, financial and legal issues; management of projects/operations with the ability of planning, implementation, and auditing; Having skills on management of self and other people
10	Enriching result oriented working approach with continous learning approach
11	Strong oral and written communication skills and ability to present ideas and information effectively
12	Monitor and communicate with colleagues in a foreign language using at least the European Language Portfolio B1 General Level
13	Ability to work with people of various cultural and educational background by valuing team work, developing emphathy and listening skills
14	Being conscious on social, academic and professional ethical values
15	Development of critical theoretical appreciation of ´how´, ´why´ and ´where´ HRM contributes to and supports employee and societal development, and implementing these approach for applied and graduate projects and working life

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

	L1	L2	L3	L4
P2	3	3	3	3
P4	3	4	5	3
P6	4	3	3	4
P14	3	4	3	3