



YAŞAR UNIVERSITY
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES
BUSINESS ADMINISTRATION
DEPARTMENT
COURSE SYLLABUS

Course Title	Course Code	Semester	Course Hour / Week		Local Credit	ECTS
			Theory	Practice		
CALCULUS FOR BUSINESS & ECONOMICS II	MATH 104	Spring	3	0	3	6
Course Type	Compulsory					
Language of Instruction	English					
Level of Course	Bachelor's Degree					
Mode of Delivery	Face to Face					
Prerequisites Course(s) (compulsory)	N/A					
Special Pre-Conditions of the Course(recommended)	N/A					
Course Coordinator						
Name Surname						
Assist. Prof. Dr. Esra DALAN YILDIRIM						
Course Instructor(s)						
Name Surname						
Prof. Dr. Şaban EREN, Prof. Dr. Mehmet TERZİLER, Assist. Prof. Dr. Şahlar MEHERREM, Assist. Prof. Dr. Esra Dalan YILDIRIM, Assist. Prof. Dr. Sule AYAR ÖZBAL						
Course Assistant(s)/Tutor(s)						
Name Surname						
Aim(s) of Course						
The aim of this course is to provide a logical and systematic framework in which quantitative relations can be studied.						
Course Content						
Related rates, Elasticity of demand, First and second derivatives, optimization, applications in business and economics, antiderivatives and indefinite integrals, definite integrals, integration methods, functions of several variables, partial derivatives and double integrals over rectangular regions.						
Learning Outcomes of the Course						
Upon successful completion of this course, the enrolled students will be gaining the following knowledge, skills and competences:						
C01	To develop skills for expressing very compactly the long verbal definitions of the theory related to business and economics.					
C02	To associate mathematical models with the phenomena.					
C03	To construct mathematical models for business and economic problems for arriving valid conclusions.					
C04	To interpret conclusions by using mathematical techniques for the solution of the model.					

COURSE OUTLINE/SCHEDULE (Weekly)

Week	Topic	Preliminary Preparation	Methodology and Implementation(Theory, practice, assignment etc.)
1	Implicit Differentiation, Related rates		Theory and practice
2	Elasticity of demand		Theory and practice
3	First and second derivatives and graphs		Theory and practice
4	L'Hopital's Rule		Theory and practice
5	Optimization		Theory and practice
6	Antiderivatives and Indefinite Integrals		Theory and practice
7	Integration by substitution		Theory and practice
8	The definite integrals		Theory and practice
9	Area between curves		Theory and practice
10	Applications in Business and Economics		Theory and practice
11	Integration by parts		Theory and practice
12	Other Integration methods		Theory and practice
13	Functions of several variables		Theory and practice
14	Partial derivatives		Theory and practice
15	Final Exam		Written exam

Resources

Required Course Material(s)/Reading(s)/Text Book(s)

1. R. A. Barnett, M.R. Ziegler and K.E.Byleen, Calculus For Business, Economics, Life Sciences, and Social Sciences, Pearson Global Edition, ISBN 13: 978-1-292-06228-0 (2015) 2. H. Bradley, Calculus For Business, Economics, Social and Life Sciences, McGraw-Hill International Edition, ISBN-13: 978- 0- 07- 351287- 7(2007)

ASSESSMENT

Semester Activities/ Studies	Number	WEIGHT in %
Mid-Term	1	40
Attendance	14	0
Quiz	2	10
Homework	0	0
Project	0	0
Field Studies(Technical Visits)	0	0
Presentation/Seminar	0	0
Practice(Lab., Virtual Court,Stu. Studies etc.)	0	0
Other (Internship etc.)	0	0
Course Teaching Hours(14 weeks)Total course hours	0	0
Further self-study	0	0
Contribution of final Examination and Final Project	1	50
TOTAL	19	100

ECTS /STUDENT WORKLOAD

ACTIVITIES	NUMBER	HOUR	Total WorkLoad
Mid-Term	1	15	10
Attendance	14	0	0
Quiz	2	5	10
Homework	0	0	10
Project	0	0	0
Field Studies(Technical Visits)	0	0	0
Presentation/Seminar	0	0	0
Practice(Lab., Virtual Court,Stu. Studies etc.)	0	0	0
Other (Internship etc.)	0	0	0
Course Teaching Hours(14 weeks)Total course hours	14	3	42
Further self-study	14	4	56
Contribution of final Examination and Final Project	1	20	15
Total WorkLoad			143
Total Workload/ 25			5,72
ECTS			5,72

ASSESSMENT and EVALUATION METHODS

Final grades and assessment criteria are determined according to the Yaşar University Associate Degree, Bachelor Degree and Graduate Degree Education and Examination Regulation.

STUDENT WITH DISABILITIES OR SPECIAL NEEDS

Students with disabilities or special needs are encouraged to contact the instructor and the Unit for Student with Disabilities (<http://eob.yasar.edu.tr/>) for academic adaptations.