

Department of Mathematics

Course Name	Code	Regular Semester	ECTS Credits	Credits	Lecture	4
					Application	2
					Laboratory (Hour/Week)	0
<i>Mathematics II</i>	0251312	2	6	5		
Course Language	Turkish					
Compulsory or Elective	Compulsory					
Instructor	Department of Mathematics					
Course Contents	Series; Fourier Series; Limit, Continuity, Partial Derivatives, Total Differential of Functions of Several Variables; Derivatives of Compound, Closed and Inverse Functions; Change of Variable; Problems of Maxima and Minima; Vector Analysis; Double Integrals (Change of Variables, Volume Calculus, Areas of Surface), Triple Integrals, Line Integrals, Surface Integrals.					
Course Objectives	<ol style="list-style-type: none"> 1. To give fundamentals of mathematics knowledge. 2. To be able to analyse problems which are met in the field of mathematics and to gain the ability of problem solving. 3. To gain analytical thinking, discussion and evaluation. 					
Course Outcomes (The knowledge and the skills that the student will gain at the end of the course)	<ol style="list-style-type: none"> 1. To have the fundamentals of mathematical knowledge and culture. 2. To have analytical thinking and evaluation. 3. The skill of evaluation and studying problems which occur in other disciplines. 					
Textbook	Course Notes					
Additional References	<ol style="list-style-type: none"> 1. "Calculus" Thomas-Finney Addison-Wesley, 1998 2. "Calculus" Schaum's outline series, Frank Ayres, 1979 3. "Yüksek Matematik" volume 2-3, Ahmet Karadeniz, 1993 					
Prerequisite Courses						
Prerequisite Subjects	Derivative and Integral					
Homework/Project						
Laboratory						
Computer Applications						
Additional Practices						
Course Evaluation Criteria			Number		Effective Proportion %	
	Midterm Exams		2		60	
	Quiz					
	Homework					
	Term Projects					
	Term Papers					
	Laboratory					
	Other					
	Final Exam		1		40	
Division of Course Credit (%)	Basic Sciences				100	
	Basic Engineering and Departmental Core Courses					
	Departmental Core Courses					
	Social Sciences					

WEEKLY COURSE PLAN

Week	Subject
1	<i>Series</i>
2	<i>Series</i>
3	<i>Fourier Series</i>
4	<i>Fourier Series</i>
5	<i>Limit, Continuity, Partial Derivatives, Total Differential of Functions of Several Variables</i>
6	<i>Derivatives of Compound, Closed and Inverse Functions; Change of Variable</i>
7	<i>Change of Variable; Problems of Maxima and Minima</i>
8	<i>1st midterm exam Vector Analysis</i>
9	<i>Vector Analysis (Gradient, Divergence, Rotational, Laplacian); Double Integrals</i>
10	<i>Double Integrals (Change of Variables, Volume Calculus)</i>
11	<i>Double Integrals (Volume Calculus, Areas of Surface)</i>
12	<i>Triple Integrals</i>
13	<i>2nd midterm exam;. Line Integrals</i>
14	<i>Line Integrals</i>
15	<i>Surface Integrals.</i>
Prepared by:	
Date:	