

Vocational School / Computer Programming

2024 - 2025 Academic Year

GENERAL MATHEMATICS

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
GENERAL MATHEMATICS	BPR1160890	Fall Semester	3+0	3	4
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Short Cycle (Associate's Degree)				
Course Type	Required				
Course Coordinator	Lect. Hatice ÇAY				
Name of Lecturer(s)	Lect. Hatice ÇAY				
Assistant(s)					
Aim	The aim of this course is to explain fundamental math contents, methods, techniques and show how to use these methods in solving certain types of problems which might possibly be encountered in many branches of science.				
Course Content	This course contains; Basic Concepts, Absolute value and intervals, Functions, Trigonometric functions, Logarithmic functions, Exponential functions, Limit, Continuity, Definition of derivative, Applications of derivative, Indefinite integrals, partial integration, Definite integration, Some applications of integral.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
1. Explain and recognize set of integers, rational number and irrational number.			12, 16, 6, 9	A, D, E, G	
2. Explain function.			12, 16, 6, 9	A, D, E, G	
3. Calculate limits of functions.			12, 16, 6, 9	A, D, E, G	
4. Calculate derivatives.			12, 16, 6, 9	A, D, E, G	
5. Calculate integrals.			12, 16, 6, 9	A, D, E, G	
Teaching Methods	12: Problem Solving Method, 16: Question - Answer Technique, 6: Experiential Learning, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, D: Oral Exam, E: Homework, G: Quiz				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Basic Concepts				
2	Absolute value and intervals				
3	Functions				
4	Trigonometric functions				
5	Logarithmic functions				
6	Exponential functions				
7	Limit				
8	Continuity				
9	Definition of derivative				
10	Applications of derivative				
11	Indefinite integrals				
12	partial integration				
13	Definite integration				
14	Some applications of integral				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			
Resources					
Thomas Kalkülüs 1. Cilt, Pearson Yayınları Matematik Analiz Salih Çelik, Birsen Yayınevi.					