

**Vocational School of Health Services / Opticianry**  
**2024 - 2025 Academic Year**  
**INTRODUCTION to BASIC MATHEMATICS**  
**Syllabus**

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
INTRODUCTION to BASIC MATHEMATICS	OPT1263390	Spring Semester	2+0	2	4
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Short Cycle (Associate's Degree)				
<b>Course Type</b>	Required				
<b>Course Coordinator</b>	Lect. Hüseyin DEMİR				
<b>Name of Lecturer(s)</b>	Lect. Hüseyin DEMİR				
<b>Assistant(s)</b>					
<b>Aim</b>	Students are aimed to have the necessary qualifications and background to be able to solve themathematical problems encountered in real life situations.				
<b>Course Content</b>	This course contains; Basic concepts,Clusters,Division Operation and Divisibility Rules,Largest Common Divisor (EBOB) and Least Common Divisor (EKOK),Rational Numbers and Number Systems,Exponential numbers,Radical numbers,Factorization,Ratio-Proportion,Solving Equations,Number Problems,Fraction Problems,Age Problems,Profit and Loss Problems.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
1. Use basic math techniques.			12, 16, 9	A	
<b>Teaching Methods</b>	12: Problem Solving Method, 16: Question - Answer Technique, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam				
<b>Lecture Schedule</b>					
Sequence	Topics	Preliminary Preparation			
1	Basic concepts	Pre-Reading			
2	Clusters	Pre-Reading			
3	Division Operation and Divisibility Rules	Pre-Reading			
4	Largest Common Divisor (EBOB) and Least Common Divisor (EKOK)	Pre-Reading			
5	Rational Numbers and Number Systems	Pre-Reading			
6	Exponential numbers	Pre-Reading			
7	Radical numbers	Pre-Reading			
8	Factorization	Pre-Reading			
9	Ratio-Proportion	Ön Okuma			
10	Solving Equations	Pre-Reading			
11	Number Problems	Pre-Reading			
12	Fraction Problems	Pre-Reading			
13	Age Problems	Pre-Reading			
14	Profit and Loss Problems	Pre-Reading			
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		40			
General Exam		60			

Resources
Badem, A. N., Tin, A.T., "Mathematics I", Dokuz Eylül University Faculty of EngineeringMathematics for Business, Economics and Social Sciences, Ergün Eroğlu, Dora Publishing, 2013