## Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
MATH 536	Teaching Experience	1	2	0	0	2	5

Prerequisites	
Admission Requirements	

Admission Requirements			
Language of Instruction	Turkish		
Course Type	Compulsory		
Course Level	Masters Degree		
Objective	Teaching the history and philosophy of mathematics		
Content	Weeks Subjects		
	1 Platonism		
	2 Picture proofs		
	3		
	4 Hilbert and Gödel		
	5 Knots and notation		
	6 What is a definition?		
	7 Constructive approach		
	8 Midterm exam		
	9		
	10 Computation, proof and		
	11 How to refute the		
	12 Calling the bluff		
	13		
	14		
	What is applied		
	mathematics?		
	Proofs, pictures and		
	procedures		
	conjecture		
	continuum hypothesis		

	Euler and his	
	contributions to	
	mathematics	
	Gauss and his	
	contributions to	
	mathematics	
References	W. Dunham, Journey through Genius: The Great Theorems of Mathematics,	
	Penguin, 1991	
	J. R. Brown, Philosophy of Mathematics: A Contemporary Introduction to the	
	World of Proofs and Pictures, Routledge, 2008	

## **Theory Topics**

Week	Weekly Contents
1	1 Platonism
2	2 Picture proofs
3	What is applied mathematics?
4	4 Hilbert and Gödel
5	5 Knots and notation
6	6 What is a definition?
7	7 Constructive approach
8	8 Midterm exam
9	Proofs, pictures and procedures
10	Computation, proof and conjecture
11	How to refute the continuum hypothesis
12	Calling the bluff
13	Euler and his contributions to mathematics
14	Gauss and his contributions to mathematics