

School of Fine Arts Design and Architecture / Industrial Design
2023 - 2024 Academic Year
MATH for DESIGNERS
Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
MATH for DESIGNERS	EUT1110004	Fall Semester	2+2	3	4
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Assist.Prof. Tahir AKKOYUNLU				
Name of Lecturer(s)	Lect.Dr. Işim DEMİRİZ				
Assistant(s)					
Aim	Understanding the mathematical methods and terms that are needed as a designer.				
Course Content	This course contains; Mathematical Thinking,Atoms of Arithmetics: Binary Systems, ,Trigonometric functions,Functions,Trigonometry ,Calculus ,Calculus,Probability & Statistics ,Calculus, derivative,Calculus, derivative,Calculus, introduction to integral,Calculus, integral,Statistics and basic concepts,Golden ratio, Fibonacci, Fractal geometry.				
Course Learning Outcomes		Teaching Methods	Assessment Methods		
2) will know ratio, proportion and symmetry,		12, 9	A, E		
1) will know the basic terminology about mathematics,		12, 9	A, E		
3) will know area, volume and the centre of gravity calculations,		12, 9	A, E		
4) will be able to understand the role of mathematics in any design project,		12, 9	A, E		
5) can include mathematics in to his/her projects		12, 9	A, E		
Teaching Methods	12: Problem Solving Method, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Mathematical Thinking				
2	Atoms of Arithmetics: Binary Systems,				
3	Trigonometric functions				
4	Functions				
5	Trigonometry				
6	Calculus				
7	Calculus				
8	Probability & Statistics				
9	Calculus, derivative				
10	Calculus, derivative				
11	Calculus, introduction to integral				
12	Calculus, integral				
13	Statistics and basic concepts				
14	Golden ratio, Fibonacci, Fractal geometry				
Evaluation Methods		Weight(%)			
Midterm Exam		50			
General Exam		50			

Resources
To be distributed by the lecturer.1)Khan Academy Web Site 2)Hemenway, Priya, The Secret Code: The Mysterious Formula that rules art, nature and science. Cologne: Evergreen 3)Mathematics Illuminated Web Site