



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Introduction to Analytical Geometry							
Course Code		MAT185		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	106 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to explain the relationship between the properties of geometric shapes and objects, and use this knowledge to construct, analyze and classification of geometric shapes and objects.							
Course Content		Angles, triangles, vectors, analytic investigation of lines, planes, solids and space geometry.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Case Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Lise Milli Eğitim Geometri Kitabı
2	Esen Yayınları Geometri Kitabı
3	Zambak Yayınları Geometri Kitabı.
4	Güvender Yayınları Geometri Kitabı.

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic geometric concepts
2	Theoretical	Introctuction to coordinate geometry
3	Theoretical	Coordinate geometry
4	Theoretical	Vectors in analytical plane
5	Theoretical	Line equation in analytical plane
6	Theoretical	Equivalence and similarity of triangles
7	Theoretical	Similarity of triangles
8	Intermediate Exam	Midterm exam
9	Theoretical	Polygons and polygonal regions
10	Theoretical	Right prisms and pyramids
11	Theoretical	Circles and closed disks
12	Theoretical	Right circular cylinders
13	Theoretical	Right circular cones
14	Theoretical	Spheres
15	Theoretical	Space geometry
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	2	70
Midterm Examination	1	12	2	14
Final Examination	1	20	2	22
Total Workload (Hours)				106
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	To examine equivalence, similarity, reflection, translation and rotation of the figures, and to use of these in the construction of patterns and decorations
2	To understand the properties of the line segments, rays and angles, and to comprehend the relations among them
3	To determine the basic elements of geometric shape and to analyze the expansion of surfaces with drawing
4	To learn equivalence and similarity of triangles with properties of basic elements of triangles
5	To introduce Pythagoras Theorem of the right-angled triangle and to determine the trigonometric ratio of acute angles
6	To understand of geometric shapes with the use of solid-state and space geometry
7	To use geometric tools effectively

