AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		General Mathematics III						
Course Code		MAT273		Couse Level		First Cycle (Bachelor's Degree)		
ECTS Credit	5	Workload	125 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to give information about vector algebra and is to comprehend matrices and determinants, is to teach differential equations.						
Course Content		Vector algebra, matrices, determinants, radians, divergence and rotations, differential equations						
Work Placement		N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Discussion, Individual 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	Kenneth A. Ross, Elementary Analysis: The Theory of Calculus, Springer-Verlag(1980)
2	Çoker ., Özer O., Taş K. '' Genel Matematik", Cilt 1 (1996)
3	Thomas, G.B. and Finney, R.L.,"Calculus and Analytic Geometry", 9th ed.,Addison Wesley,(1998)
4	Prof.Dr.Mustafa Balcı "Genel Matematik I" Balcı Yayınları
5	Doç.Dr.Cevdet Cerit,"Yüksek Matematik I"
6	Yrd.Doç.Dr.Gonca Güngöroğlu, Prof.Dr. Abdullah Harmancı "Lineer Cebir dersleri problemler ve çözümleri"

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of vector and operations on vectors
2	Theoretical	Bases
3	Theoretical	The length of a vector and unit vector
4	Theoretical	Tangent vector, normal vector and dot product
5	Theoretical	İki vektörün vektörel çarpımı, karma çarpım
6	Theoretical	Scalar triple product formula
7	Intermediate Exam	Midterm Exam
8	Theoretical	Definition of matrices
9	Theoretical	Type of matrices
10	Theoretical	Determinants
11	Theoretical	Radian, divergence and rotation
12	Theoretical	Linear and non-linear differential equations
13	Theoretical	Separable differential equations
14	Theoretical	Homogeneous Differential Equations
15	Theoretical	Exact Differential Equations
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Midterm Examination	1	21	2	23
Final Examination	1	30	2	32
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Ability to understand vector algebra
2	Ability to understand the concept of matrices
3	Ability to learn knowledge about determinants
4	Ability to give knowledge about radian, divergence and rotation
5	Ability to solve differential equations