



ESOGÜ Mathematics and Computer Sciences Department
COURSE INFORMATION FORM

SEMESTER	Fall
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COURSE CODE	821617006	COURSE NAME	Projective Geometry I
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SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
7	3	0	0	3	5	COMPULSORY () ELECTIVE (x)	Turkish

COURSE CATAGORY

Mathematics	Computer		Social Science
x			

ASSESSMENT CRITERIA

	Evaluation Type	Quantity	%
MID-TERM	1st Mid-Term	1	40
	2nd Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (.....)		
FINAL EXAM		1	60
PREREQUIEITE(S)	None		
COURSE DESCRIPTION	Euclid's geometry and other geometries, various geometrical structures, Arguesian, Pappian and Fano planes.		
COURSE OBJECTIVES	To introduce non-Euclidian geometries To discover some relations between algebra and geometry		
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	To inform non-Euclidian geometries		
COURSE OUTCOMES	By the end of the course students should be able to: To introduce non-Euclidian geometries, To discover some relations between algebra and geometry To introduce non-Euclidian geometries		
TEXTBOOK	Projektif Geometri (Kaya, R.)		
OTHER REFERENCES	Combinatorics of finite geometries (Batten, L.M.)		
TOOLS AND EQUIPMENTS REQUIRED	None		

COURSE SYLLABUS	
WEEK	TOPICS
1	Euclid's geometry and other geometries
2	What is geometry? Euclid's geometry
3	Various geometrical structures (Undefined terms, affine planes)
4	Projective planes
5	The relations between affine and projective planes, Subprojective planes
6	Other geometrical structures
7	Problem Solutions
8	Midterm
9	Dezarguesian Planes
10	Pappian Planes
11	Projective planes on division rings
12	Example of projective planes which is arguesian but not Pappian.
13	Fano Plane
14	Projective planes which hold and/or not hold Fano's axiom.
15	Problem Solutions
16-17	Final Exam

NO	PROGRAM OUTCOMES	3	2	1
1	The ability to apply knowledges of Mathematics and Computer Sciences,	X		
2	To have sufficient theoretical and practical knowledge of Mathematics at international level,	X		
3	The ability of describing, modelling and solving of mathematical problems at Mathematics and related subjects,	X		
4	The skill to solve and design a problem process in accordance with a defined target,	X		
5	Skills to analyze data, interpret and apply to other datum and using these data on computer,		X	
6	The skill to use the modern techniques and computational tools needed for mathematical applications,		X	
7	The skill to make team work within the discipline and interdisciplinary,	X		
8	The ability to improve oneself by following the developments on other modern, scientific and technological subjects as well as Mathematics and Computer Sciences,	X		
9	The skill to communicate orally and in written way, in a clear and concise manner by having individual work skills and ability to independently decide and analytical thinking,	X		
10	The skill to have professional and ethical responsibility,		X	
11	The skill to have consciousness for quality issues and scientific research,	X		
12	The skill to be sensitive to environmental issues related with problems and development of living area and consistent in the social relations,			X
13	Ability to solve problems in the working life faced to find an appropriate algorithms via mathematical modeling and to write computer programs,		X	
14	The skill to developed design of software systems at different complex levels,		X	
15	The credence of necessity of life-long learning and ability to apply the formation long-life learning.		X	
1:None. 2:Partially contribution. 3: Completely contribution.				

Instructor(s): Prof. Dr. Ziya AKÇA

Signature:

Date: