

ALGEBRAIC GEOMETRY I

1	Course Title:	ALGEBRAIC GEOMETRY I	
2	Course Code:	MAT6307	
3	Type of Course:	Optional	
4	Level of Course:	Third Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	5.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	-	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. SÜLEYMAN ÇİFTÇİ	
15	Course Lecturers:	Doç. Dr.Basri ÇELİK-Yrd. Doç.Dr. Atilla AKPINAR	
16	Contact information of the Course Coordinator:	E-posta: sciftci@uludag.edu.tr Telefon: +90 224 2941754 Adres: Uludağ Üniversitesi Fen-Edebiyat Fakültesi Matematik Bölümü 16059 Görükle-Bursa-TÜRKİYE	
17	Website:		
18	Objective of the Course:	To teach basic concepts needed in studies of algebraic geometry	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Calculates cross ratio
		2	Constructs an geometric structure by using coordinates
		3	Learns important of quadrangles for coordinatization
		4	Interprets the relation among different geometries
		5	Knows Euclidean and non-Euclidean geometries
		6	Uses projective and affine transformations
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		10	
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Basic concepts of geometry		
2	Triple geometry.		
3	Synthetic projective geometry		
4	Projective transformations		
5	Coordinate systems		

6	Quadrangles	
7	Analytic projective geometry	
8	Cross ratio	
9	Affine geometry	
10	Ideal points, affine transformations	
11	Euclid plane geometry, Non-Euclidean geometry	
12	Euclid transformations	
13	Non-Euclidean geometry	
14	Hyperbolic geometry, elliptic and spherical geometries	

22	Textbooks, References and/or Other Materials:	1. B.E.Meserve, Fundamental Concepts of Geometry, Dover Publications Inc., New York, 1995, ISBN: 0 486 63415 9 2. L.Edwards, Projective Geometry, Floris Boks, Edinburgh, 2003, ISBN: 0 86315 393 3
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23	Assesment	
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT		
Midterm Exam	0	0.00		
Quiz	0	0.00		
Home work-project	0	0.00		
Activites		Number	Duration (hour)	Total Work Load (hour)
Contribution of Term (Year) Learning Activities to Success Grade	0	14	3.00	42.00
Practicals/Labs	0		0.00	0.00
Contribution of Final Exam to Success Grade	1	14	5.00	70.00
Self study and preperation				
Homeworks	0		0.00	0.00
Measurement and Evaluation Techniques Used in the Projects	0		0.00	0.00
Field Studies	0		0.00	0.00
Midterm exams	0		0.00	0.00
Others	14		5.00	70.00
Final Exams	1		12.00	12.00
Total Work Load				194.00
Total work load/ 30 hr				6.47
ECTS Credit of the Course				5.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	2	1	2	0	1	2	1	2	2	2	0	0	0	0	0	0
ÖK2	2	2	1	0	2	2	2	1	1	1	0	0	0	0	0	0
ÖK3	3	2	2	0	3	3	2	2	2	2	0	0	0	0	0	0
ÖK4	3	4	3	0	4	3	4	2	2	3	0	0	0	0	0	0

ÖK5	4	3	2	0	3	4	5	3	4	4	0	0	0	0	0	0
ÖK6	4	4	3	0	5	3	4	4	3	3	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			