COORDINATE GEOMETRY I

1	Course Title:	COORDINATE GEOMETRY I
2	Course Code:	MAT5323
3	Type of Course:	Optional
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	6.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. Atilla AKPINAR
15	Course Lecturers:	Prof. Dr. Basri ÇELİK Doç. Dr. Fatma ÖZEN ERDOĞAN
16	Contact information of the Course Coordinator:	E-posta: aakpinar@uludag.edu.tr Telefon: +90 224 2941774 Adres: Uludağ Üniversitesi Fen-Edebiyat Fakültesi Matematik Bölümü 16059 Görükle-Bursa-TÜRKİYE
17	Website:	
18	Objective of the Course:	To gain the ability of solution by converting a given problem to an algebraic problem and so to improve the ability of mathematical thinking
19	Contribution of the Course to Professional Development:	To gain the ability of solution by converting a given problem to an algebraic problem and so to improve the ability of mathematical thinking
20	Learning Outcomes:	
		1	Can algebraically state the concepts of points and lines in the plane.
		2	Can use determinants of order two and third.
		3	Can algebraically state the concepts of lines and planes in the space
		4	Can use transformations of coordinates
		5	Can establish a relation between geometric properties and algebraic properties
		6	
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		10	

21	Course Content:	

Course Content:

Week	Theoretical	Practice

1	An equation of first degree in two unknowns, cartesian coordinates in the plane, distance between two points	
2	An equation of a line, parametric equation of a line	
3	Slope of a line, Two equations of first degree in two unknowns, determinants of the second order	
4	The set of lines through a point, axes	
5	Circle, line coordinates	
6	Rectangular coordinates in space	
7	Distance between two points	
8	An equation of plane, two homogeneous equations of first degree in three unknowns	
9	Determinants of the third order	
10	Three homogeneous equations of first degree in three unknowns	
11	Equations of planes determined by certain conditions	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	9.00	126.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams		0.00	0.00
Others	0	0.00	0.00
Final Exams	1	12.00	12.00
Total Work Load			180.00
Total work load/ 30 hr			6.00
ECTS Credit of the Course			6.00

Coordinate Geometry, L.P. Eisenhart, Dover Publications, 2005.

The Macmillan Company, 1909.

Luxton, Nabu Press, 2010.

Hari Kishan, Atlantic Publishers & Distributors (P) Ltd., 2010.

23	Assesment

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	100.00
Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade	0.00	

Contribution of Final Exam to Success Grade	100.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course	The system of relative evaluation is applied.	

24	ECTS / WORK LOAD TABLE

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	4	4	1	0	1	2	2	1	3	2	0	0	0	0	0	0
ÖK2	3	4	1	0	1	1	1	1	2	1	0	0	0	0	0	0
ÖK3	3	4	2	0	2	1	1	2	2	1	0	0	0	0	0	0
ÖK4	5	5	2	0	2	1	1	2	2	1	0	0	0	0	0	0
ÖK5	4	4	1	0	2	2	2	1	3	2	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