ANALYTIC GEOMETRY I

1	Course Title:	ANALYTIC GEOMETRY I	
2	Course Code:	MAT2009	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	4.00	
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:	Yrd.Doç.Dr. MENEKŞE SEDEN TAPAN BROUTIN	
15	Course Lecturers:	Y.Doç.Dr. Menekşe Seden TAPAN BROUTIN	
16	Contact information of the Course Coordinator:	Y.Doç.Dr. Menekşe Seden TAPAN BROUTIN tapan@uludag.edu.tr 0 224 2942162 Uludağ Üniversitesi Eğitim Fakültesi, A Blok, İlköğretim Bölümü, 16059 Nilüfer, Bursa	
17	Website:		
18	Objective of the Course:	Introducing the coordinates system. Conceptualizing the basic concepts about points, lines and vectors on the plane and on the three-dimensional space.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Defines concepts of point and line in plane analytic geometry.
		2	Relations between point and line in plane can be explained.
		3	Relations between different coordinate systems can be explained.
		4	Transitive practice in different coordinate systems can be done.
		5	Vectors in plane can be defined
		6	Transformation of displacement in plane can be explained and practiced.
		7	Transformation of rotation in plane can be explained and practiced.
		8	Vectors in three-dimensional space can be defined
		9	Cross and mixed scalar products can be explained
		10	Concepts of point, line and plane in three-dimensional space can be defined.
21	Course Content:		
	Course Content:		
Week	Theoretical		Practice

1	Coordinate systems, orthogonal coordinate system and practice	
2	Coordinate system and practice	
3	Polar coordinate system and practice	
4	Vectors in plane	
5	Lines in plane	
6	Cartesian form of line equation, distance between point and line	
7	Coordinate Transformations in Plane	
8	Displacement transformation	
9	Rotation transformation	
10	Vectors in three-dimensional space	
11	Vector/cross product	
12	Mixed scalar product	
13	Parallelism and orthogonality of two lines, angles between two lines	
14	Plane in three-dimensional space, distance between point and plane.	

22	Textbooks, References and/or Other Materials:	1. Kaya, R. (2009) Analytic Geometry, Science and Technology Publishing 2. Balci, M. (2011) Analytic Geometry, Balci Publishing 3. Lecture Notes
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24	**ECTS / WORK LOAD TABLE**

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	3.00	42.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	16.00	16.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			120.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

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	4	0	3	0	5	0	5	2	0	0	0	0	0	0	0	0
ÖK2	4	0	3	0	4	0	5	2	0	0	0	0	0	0	0	0
ÖK3	4	0	3	0	4	0	5	2	0	0	0	0	0	0	0	0
ÖK4	4	0	3	0	4	0	5	2	0	0	0	0	0	0	0	0
ÖK5	4	0	3	0	4	0	5	2	0	0	0	0	0	0	0	0
ÖK6	4	0	2	0	4	0	5	2	0	0	0	0	0	0	0	0
ÖK7	4	0	2	0	4	0	5	2	0	0	0	0	0	0	0	0
ÖK8	4	0	3	0	4	0	5	4	0	0	0	0	0	0	0	0
ÖK9	4	0	3	0	4	0	5	4	0	0	0	0	0	0	0	0
ÖK10	4	0	3	0	4	0	5	4	0	0	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**						