ANALYTIC GEOMETRY II

1	Course Title:	ANALYTIC GEOMETRY II	
2	Course Code:	MAT2014	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	4	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	2.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. CENGIZHAN MURATHAN	
15	Course Lecturers:	Prof. Dr. Kadri ARSLAN,, Prof.Dr. Basri ÇELİK	
16	Contact information of the Course Coordinator:	cengiz@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	The purpose of this course is to give the principal information about the geometry to the students(which they need to during the undergraduate and graduate education). Teach the ways of how to solve the encountered problems.The other purpose of this course is to construct the fundamental for the Euclid, Differential Geometry and non-Euclidean geometries.	
19	Contribution of the Course to Professional Development:	The students learn Three dimensional Eucled space and basic surfaces in thsi space.	
20	Learning Outcomes:		
		1	They understand the concept of line and plane in space
		2	They learn the geometric interpretation of vector and scalar product.
		3	They learn the definition of surface.
		4	They have general information about Sphere, cone, cylinder surface.
		5	They learn , surfaces of revolution and quadratic surfaces.
		6	They learn other coordinate systems in space,cylindrical coordinates, spherical coordinates and polar coordinates
		7	They learn curves in the space
		8	
		9	
		10	
21	Course Content:		

Course Content:

Week	Theoretical	Practice

1	Cartesian coordinates in space, Space vectors, vector operations.	Exercise
2	The line equation in space, parallel and perpendicular lines, angle between two lines, the distance from a Line to a point	Exercise
3	The intersection point of two lines, the distance between two lines, plane equation, Plane equation(three points given)	Exercise
4	Line and plane relation,the volume of a tetrahedron, Planes relative to each other situations,the situations of a line and a plane, symmetry.	Exercise
5	Definition of surface and sphere surface.	Exercise
6	Cylinde surfacer	Exercise
7	Cone surface	Exercise
8	Surfaces of Revolution	Exercise
9	Quadric surfaces	Exercise
10	Rotations in Space	Exercise
11	by and coordination	Exercise
12	analytic geometry on the n-dimensional	Exercise
13	a point in R ^ n,	Exercise
14	Hyperplane in R ^n, hypersurfaces	Exercise

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preparation	11	2.00	22.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	21.00	21.00
Others	0	0.00	0.00
Final Exams	1	21.00	21.00
Total Work Load			141.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

Materials:	Üniversitesi, Fen Fak. Matematik Bol.Ankara,1998.
	Eskişehir, 1996
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
ÖK5	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
ÖK7	3	0	0	0	0	0	0	0	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