GEOMETRY

1	Course Title:	GEOMETRY	
2	Course Code:	İMT1004	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	1	
6	Semester:	2	
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:	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:	Studying Euclidean geometry thorough all its axiomatic structure and conceptualizing the properties of plane figures.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Explains the historical development of Euclidean and non-Euclidean geometries
		2	Describes the axiomatic structure of geometry
		3	Explains concepts of defined and undefined terms, axiom and theorem
		4	Read the geometry book written by Ataturk and understand its content and its importance
		5	Formulates basic axioms of Euclidean geometry and use them in proofs
		6	Comments geometric concepts with a deductive point of view
		7	Formulates sufficient and complete definitions for the concepts of triangle, rectangle and polygon and make modulation between these definitions and geometric properties
		8	Realises basic geometric drawings with ruler and compass and make detailed explanations for these drawings
		9	Defines the concepts of the circle and disk, proove theorems about the angle and length.
		10	Formulates properties of objects in space, areas and volumes of solids
21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Euclidean and non-Euclidean geometries' historical development. Axiomatic structure of geometry, concepts of defined and undefined terms, axioms and theorems	
2	Review of the geometry book written by Atatürk. Combination axioms and relation and theorems and proofs related to the subject.	
3	Order axioms and relation and theorems and proofs related to the subject. Cantor's continuity axiom.	
4	Congruence axioms and relations for segments. Construction of segments, equilateral triangles using only compass and unitless ruler	
5	Concept of angle. Congruence axioms and relations for angles; theorems and proofs related to the subject. Construction of angles using only compass and unitless ruler.	
6	Concept of triangle. Congruence axioms and relations for triangles; theorems and proofs related to the subject. Construction of triangles using only compass and unitless ruler.	
7	Matching and equality in triangles. SAS definition, ASA, SSS, SAA, SSAA* theorems ruler and compass. Triangle inequality. SAS inequality and inclined line theorems and their	
9	Circle-line relations in the plane. Positions of two circles to each other and their drawings	
10	Parallels axioms and relation and theorems	
11	Drawings of paralll lines on a plane	
13	Full and sufficient definition concept.	
	definitions of triangle, quadrilateral, polygon concepts and making the transition between these definitions and geometrical properties.	
14	Objects in space, prisms, pyramids, cylinder, cone, sphere. Areas and volumes of these objects.	
22	Textbooks, References and/or Other Materials:	
23	Assesment	

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	4.00	56.00
Homeworks	4	12.00	48.00
Projects	2	17.00	34.00
Field Studies	0	0.00	0.00
Midterm exams	1	25.00	25.00
Others	0	0.00	0.00
Final Exam	1	35.00	35.00
Total Work Load			240.00
Total work load/ 30 hr			8.00
ECTS Credit of the Course			4.00

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

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	1	2	0	0	0	0	0	0	0	0	0
ÖK2	3	0	3	0	5	0	4	0	0	0	0	0	0	0	0	0
ÖK3	3	0	2	0	5	0	5	0	0	0	0	0	0	0	0	0
ÖK4	3	0	2	0	1	0	2	1	0	0	0	0	0	0	0	0
ÖK5	3	0	2	0	5	0	5	0	0	0	0	0	0	0	0	0
ÖK6	3	0	3	0	5	0	5	0	0	0	0	0	0	0	0	0
ÖK7	3	0	3	0	5	0	5	0	0	0	0	0	0	0	0	0
ÖK8	3	0	4	0	4	0	4	0	0	3	0	0	0	0	0	0
ÖK9	3	0	2	0	5	0	5	0	0	0	0	0	0	0	0	0
ÖK10	2	0	1	0	4	0	4	2	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**