LINEAR ALGEBRA I										
1	Course Title:	LINEAR	ALGEBRA I							
2	Course Code:	MAT100	3							
3	Type of Course:	Compuls	sory							
4	Level of Course:	First Cyc	le							
5	Year of Study:	1								
6	Semester:	1								
7	ECTS Credits Allocated:	7.00								
8	Theoretical (hour/week):	3.00								
9	Practice (hour/week):	2.00								
10	Laboratory (hour/week):	0								
11	Prerequisites:	-								
12	Language:	Turkish								
13	Mode of Delivery:	Face to f	face							
14	Course Coordinator:	Prof. Dr. SÜLEYMAN ÇİFTÇİ								
15	Course Lecturers:	Doç. Dr.Basri ÇELİK- Yrd. Doç.Dr. Atilla AKPINAR- Öğr.Gör.Dr.Esen İYİGÜN								
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:	The primary objective of this course is to understand thoroughly (with proofs, algebraic and geometric applications) the basic material on vector spaces and to develop some computational skills in working with linear transformations and the matrices used to represent them								
19	Contribution of the Course to Professional Development:									
20	Learning Outcomes:									
		1	gives an understanding of the algebra of finite-dimensional vector spaces as a basis for further study of abstract algebra							
		2	acquires an understanding of some fundamental ideas of linear algebra, including vectors, vector spaces, linear independence, bases, dimension and linear transformations especially in the case of R^(n) and C^(n)							
		3	enhances your capability for studying abstraction and producing formal mathematical arguments (proofs)							
		4	learns some important applications of linear algebra in other mathematical disciplines.							
		5	understands the relationship between geometry and linear algebra, including the roles of inner products and orthogonality.							
		6	uses the Gram-Schmidt algorithm to orthonormalize a set of vectors.							
		7	utilizes linear transformations as mappings from one vector space to another.							
		8	finds the change-of-coordinates matrix from a given basis to another.							
		9	uses definitions and theorems to prove results in all of the above topics.							

		10										
21	Course Content:											
	Course Content:											
Week	Theoretical		Practice									
1	Groups		Solving problem									
2	Fields and subfields		Solving problem									
3	The definition of vector spaces and the examples	neir	Solving problem									
4	Standart vector spaces R^(n) and C^	(n)	Solving problem									
5	Subvector spaces		Solving problem									
6	The properties of vector spaces R^(n)	Solving problem									
7	Midterm exam and evaluation of mid exam, repeat of previous subjects	term	Solving problem									
8	Linear independent, the method of orthogonality		Solving problem									
9	The properties about basis of vector dimensions of subspaces	spaces,	Solving problem									
10	Space of direct sums and subspaces product spaces	of inner	Solving problem									
11	Linear transformations in vector space examples of linear transformation	es and	Solving problem									
Activit	es		Number	Duration (hour)	Total Work Load (hour)							
Theore	rical Linear isomorphism, algebra of Hom	(V,W)	Splving problem	3.00	42.00							
Practica	als/Labs		14	2.00	28.00							
Selt_stu	eventooks; References and/or Other		1) ¹ ⁴ ineer Cebir, H.Hilm	5,00 Hacısalihoğlu, Ank	Ankara, 1985							
Homew	vorks		0	0.00	0.00							
Project	8		3) ⁰ Linear Algebra, Serg	97 90								
Field St	tudies		0 0.00 0.00									
Midtern	n exams		5 Fundamentals of Line	i ¹ Alonizu,								
Others			14	42.00								
Final E	kams		Johes and Barlett Publis	14.00								
Total W	/ork Load				210.00							
Total w	orkissad/30 hr				7.00							
ECTS (Credit of the Course				7.00							
Midtern	n Exam	1	40.00									
Quiz		0	0.00									
Home v	work-project	0	0.00									
Final E	xam	1	60.00									
Total		2	100.00									
Contrib Succes	ution of Term (Year) Learning Activities	es to	40.00									
Contrib	ution of Final Exam to Success Grade	Э	60.00									
Total			100.00									
Measur Course	rement and Evaluation Techniques Us	sed in the										
24	ECTS / WORK LOAD TABLE	24 ECTS / WORK LOAD TABLE										

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	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
ÖK10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK9	5	4	4	0	4	3	3	4	4	5	0	0	0	0	0	0
ÖK8	5	4	4	0	4	4	3	5	5	5	0	0	0	0	0	0
ÖK7	3	2	5	0	4	2	3	5	3	4	0	0	0	0	0	0
ÖK6	4	4	3	0	5	3	4	4	3	3	0	0	0	0	0	0
ÖK5	4	3	2	0	3	4	5	3	4	4	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	rib 1 very low 2 low n el:				3 Medium			4 High			5 Very High					