Course Syllabus

Code - Course Title	**MAT204 - Linear Algebra II**
Course Type	IV. SEMESTER
Laboratory + Practice	4+0
ECTS	**5.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. NEVİN ORHUN

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	Calculus 1,2, Abstract Mathematics 1,2, Analytic Geometry 1,2
Recommended Resources	*Otto Bretscher, Linear Algebra with Applications, 2nd Edition, Prentice-Hall, 2001.
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Vectors in Euclidean Spaces	
Week - 2		General Vector Spaces	
Week - 3		Subspaces	
Week - 4		Linear Dependence and Independence	
Week - 5		Basis of a Vector Space	
Week - 6		Properties of base	
Week - 7		Linear Transformations	
Week - 8		Inner Product Spaces	
Week - 9		Eigenvalues and Eigenvectors	
Week - 10		Daigonalizations	
Week - 11		Daigonalizations of Symmetric Matrices	
Week - 12		Properties of diagoizable matrices	
Week - 13		Quadratic Forms	
Week - 14		Applications	

Learning Outcomes

#	Learning Outcome
1	express the set of vectors in euclidean spaces is a vector space.
2	generalize the concepts of a real (complex) vector space to an arbitrary finite-dimensional vector space.
3	investigate properties of vector spaces and subspaces using by linear transformations.
4	generalize the concept of a real (copmlex) inner product space to an arbitrary inner product space.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	20
Final Exam	1	50
2.Midterm Exam	1	30
	Sum (%)	**100**