Course Syllabus

Code - Course Title	**MAT832 - Analysis II**
Course Type	II. SEMESTER
Laboratory + Practice	4+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses

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	None
Recommended Resources	Stewart, J. (1991). Calculus. California: A Division of Publishing Company.
Work Placement	N/A

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		The concept of multivariate function, researching its definition and value sets	
Week - 2		Drawing graphs of two-variable functions: plane, sphere, ellipsoid, parabolic, hyperboloid and cylindrical surfaces	
Week - 3		Limit of two variable functions.	
Week - 4		Continuty of two variable functions	
Week - 5		Partial derivative	
Week - 6		High-order Partial derivative	
Week - 7		Tangent plane and differantial of two variable function.	
Week - 8		Directional derivative	
Week - 9		Local extramum values, Lagrange multipliers	
Week - 10		The concept of double integral	
Week - 11		Applications of geometrical interpretation of double integral (area, volume)	
Week - 12		Coordinat transformations	
Week - 13		Coordinate transformations, and area calculations.	
Week - 14		Coordinate transformations, and volume calculations.	

Learning Outcomes

#	Learning Outcome
1	explain the concept of multi variable function.
2	interpret two variable function geometrically.
3	explain the concepts of limit and continuity of two variable function.
4	interpret the concepts of limit and continuity of two variable function.
5	do calculations about limit and continuity.
6	do derivation calculations of multi-variable functions.
7	explain the concept of double integral.
8	do calculations of double integrals.

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.