Course Syllabus

Code - Course Title	**MAT831 - Analysis I**
Course Type	I. SEMESTER
Laboratory + Practice	6+0
ECTS	**7.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ GONCA İNCEOĞLU, PROF. DR. NESLİHAN UYANIK

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	Thomas Calculus
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Limits of the single variable functions and their applications	
Week - 2		Continuity of the single variable functions and its applications	
Week - 3		Derivatives of the single variable functions	
Week - 4		The rules of taking derivatives of single variable functions	
Week - 5		The rules of taking derivatives of single variable functions	
Week - 6		The derivatives of the trigonometric, logarithmic, exponential hyperbolic functions and their inverses, and implicit functions, higher order derivatives.	
Week - 7		The derivatives of the trigonometric, logarithmic, exponential functions, their inverses, and implicit functions, higher order derivatives	
Week - 8		Ekstremum and salt ekstremum points of functions, problems about ekstremum points	
Week - 9		The concept of integral, indefinite integrals	
Week - 10		The concept of integral, indefinite integrals	
Week - 11		Technics of taking integral	
Week - 12		Technics of taking integral	
Week - 13		Definite integrals	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 14		Calculation of area and volume with integral	

Learning Outcomes

#	Learning Outcome
1	Explain limit, continuity, derivatives and integrals of single variable functions.
2	Interpret limit, continuity, derivatives and integrals of single variable function.
3	Calculate limit and continuity.
4	Calculate derivatives of trigometric, logaritmic, exponential, hiperbolic, implict and inverse functions.
5	Relate the concept of derivative to several situations.
6	Interpret the concept of diferential of function.
7	Describe the concept of integral.
8	Do different calculations of definite integral.

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 (%)

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	40
Final Exam	1	60
	Sum (%)	**100**