Course Syllabus

Code - Course Title	**MAT199 - Calculus I**
Course Type	I. SEMESTER
Laboratory + Practice	5+1
ECTS	**6.5**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. MURAT LİMONCU

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	Edwards, C.H. & Penney, D.E. (1988) Calculus and Analytic Geometry. Prentice Hall.
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Real numbers and real line.Intervals, the absolute value. Equations and Inequalities involving absolute values.Cartesian coordinates in the plane. Incerementts and Distances. Graphs.	
Week - 2		Cartesian Coordinates in The Plane,Equations of Lines,Equations of Circles and Conics	
Week - 3		Functions and their Graphs,Even and Odd Functions, Symetry and Reflections	
Week - 4		Sums, Differences, Products, Quotients and Multiples on Functions, Composite functions,Piecewise Defined Functions	
Week - 5		The Trigonometric Functions	
Week - 6		Limits continuty,Derivative	
Week - 7		Limit,Continuity, Derivative	
Week - 8		The Derivative	
Week - 9		Derivatives of Trigonometric Functions	
Week - 10		The Mean -Value Theorem , İncreasing and Decreasing Functions, Approximating Small Changes,complex numbers	
Week - 11		Higher-Order Derivatives, İmplicit Differentiation	
Week - 12		Invers functions	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 13		Logarithmic functions	
Week - 14		Aplications of derıvatıve	

Learning Outcomes

#	Learning Outcome
1	explain basic concepts about mathematics.
2	explain foundations of analyses according to limit and integration.
3	explain basis of continuous functions.
4	express basis of derivation.
5	apply the concept of derivative to related rates and extreme value problems and sketch the graph of a function.

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

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