Course Syllabus

Code - Course Title	**MAT835 - The Foundations of Mathematics**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**4.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ BAŞAK BARAK

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	George B. Thomas, Maurice D. Weir, Joel R. Hass (2017) Thomas Kalkülüs (Thomas' Calculus), Çeviri Editörü Bayram Mustafa, Pearson Çoker, Doğan; Taş, Kenan, Özer, Orhan (2009) Genel Matematik, Bilim Yayınevi
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Features of real numbers and operations on real numbers	
Week - 2		Real number line, intervals and the concept of absolute value	
Week - 3		The concept of variable, algebraic expressions and identities	
Week - 4		The concept of equation, types of equation	
Week - 5		The concept of inequality, types of inequality	
Week - 6		Coordinate plane, graphs of equation and inequality	
Week - 7		Cartesian product, the concept of relation and features of relations	
Week - 8		Graphs of relation	
Week - 9		The concept of function	
Week - 10		Features and graphs of functions	
Week - 11		Features and graphs of functions	
Week - 12		Piecewise defined, polynomial and rational functions	
Week - 13		Exponential and logarithmic functions	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 14		Trigonometric and inverse trigonometric functions	

Learning Outcomes

#	Learning Outcome
1	Explains real numbers.
2	Explains the concept of variable.
3	Explains the concept of equation.
4	Explains the concept of inequality.
5	Explains cartesian product.
6	Explains the concept of relation.
7	Explains the concept of 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	40

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