Course Syllabus

Code - Course Title	**MTE513 - Basic Mathematical Concepts**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**7.5**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ GONCA İNCEOĞLU

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	Başkan, T., Bizim, O., ve Cangül İ.N., (2006), Metrik ve Topolojik Uzaylara Giriş, Nobel yayın, Ankara., Thomas, G.B., Weir M. D., Hass J.R., Thomas Kalkülüs, Çev edit: Bayram, M., Cilt 1, 2010
Work Placement	none

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Mathematical proof techniques	
Week - 2		the set concept: finite, infinite, countable sets	
Week - 3		the concept of relation: the relation properties, partial ordering, exact order relations	
Week - 4		absolute value, metric, norm concepts and their properties	
Week - 5		the concept of functions: single variable functions and their properties	
Week - 6		limit of single variable function	
Week - 7		continuity of single variable functions	
Week - 8		two variable functions and their properties	
Week - 9		limit of two variable functions	
Week - 10		continuity of two variable functions	
Week - 11		comparison of single and two variable functions	
Week - 12		sequences concept and their convergence	
Week - 13		serie concept	

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 14		convergence of series	

Learning Outcomes

#	Learning Outcome
1	Explain the proof methods and set concept.
2	Explain the concepts of proposition and relation
3	Explain the concepts of single variable function and limit and continuity of single variable function.
4	Explain the concepts of two variable functions and concept of limit and continuity of two variable function.
5	Explain the concept of sequence and series.

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
Final Exam	1	60
	Sum (%)	**100**