Course Syllabus

Code - Course Title	**MAT196 - Calculus II**
Course Type	II. SEMESTER
Laboratory + Practice	5+1
ECTS	**6.5**
Language of Instruction	İngilizce
Course Type	Required Courses
Course Instructor(s)	PROF. DR. NEDİM DEĞİRMENCİ

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Sums and Sigma Notation. Areas as Limits of Sums. The Definite Integral.	
Week - 2		Properties of The Definite Integral. The Fundemental Theorem of Calculus.	
Week - 3		The Method of Subsititution. Areas of plane regions.	
Week - 4		Integration by Parts. Inverse Subsititution	
Week - 5		Integrals of rational functions	
Week - 6		Improper integrals	
Week - 7		Volume by slicing, Volume by cylindrical shells	
Week - 8		Arc Length and Surface Area.	
Week - 9		Mass, Moments and Centre of Mass.	
Week - 10		Sequences and Convergence. Infinite Series.	
Week - 11		Convergence Tests for Positive Series	
Week - 12		Absolute and Conditional Convergence	
Week - 13		Power Series. Taylor and Maclaurin Series.	
Week - 14		Applications of Taylor and Maclaurin Series. The Binomial Theorem and Binomial Series.	

Learning Outcomes

#	Learning Outcome
1	explain some concepts about mathematics.
2	define various integrals.
3	express sequences and series.

Learning Outcomes

#	Learning Outcome
4	determine whether a sequence (series) is convergent or not.

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
Final Exam	1	50
2.Midterm Exam	1	30
	Sum (%)	**100**