İçerik

Ders Kodu	Dersin Adı	Yarıyıl	Teori	Uygulama	Lab	Kredisi	AKTS
MATH 501	İleri Analiz	1	3	0	0	3	7

Ön Koşul	
Derse Kabul Koşulları	

Dersin Dili	İngilizce
Türü	Zorunlu
Dersin Düzeyi	Yüksek Lisans
Dersin Amacı	The course aims to offer a new understanding of real analysis seen at undergraduate level, but in a more topological perspective. We try to understand what is the norm in analysis, and what is the exception. We don't prove everything but will try to get a deeper understanding and hope to consolidate your understanding in Real Analysis.
İçerik	1. Basic facts of real analysis, normed vector spaces, metric topology 2. Banach spaces 3. Banach spaces 2 4. Baire Theory 5. Nowhere continuous/differentiable functions and Darboux functions 6. Baire 1 functions and set of discontinuities of real functions 7. Set of convergence of sequences of functions and power series 8. Mid-term exam 9. Integration of functions in |R^2 10. Parametrized curves and Green Theorem 11. Parametrized surfaces and Stokes Theorem 12. Holomorphic functions and Cauchy theory 13. Laurent series, singularities and residues 14. Conformal applications
Kaynaklar	

Teori Konu Başlıkları

Hafta	Konu Başlıkları
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