

Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı
Açık Ders Malzemeleri

Ders izlence Formu

Dersin Kodu ve İsmi	ELE322 Communication Theory I
Dersin Sorumlusu	Doç.Dr. Murat Hüsni SAZLI
Dersin Düzeyi	Lisans
Dersin Kredisi	Ulusal: 3, AKTS: 4
Dersin Türü	Zorunlu
Dersin İçeriği	A Comprehensive Review of Signal Analysis: Fourier Series, Fourier Transforms and their properties. Continuous Wave Modulation: Amplitude Modulation, Suppressed Carrier AM, Single Side Band AM, Vestigial Side Band AM, Quadrature Amplitude Modulation. Continuous Wave Modulation: Phase Modulation, Frequency Modulation, Frequency Division Multiplexing. Pulse Modulation: Sampling Theorem, pulse amplitude modulation (PAM), Pulse Code Modulation (PCM), Time Division Multiplexing. Digital Continuous Wave Modulation: Amplitude Modulation Methods, (ASK, QAM), Phase Modulation Methods (PSK, QPSK), Frequency Modulation Methods (FSK).
Dersin Amacı	The objective of the course Communication Theory I is to help the student to get telecommunications engineering formation. In this line, it is aimed first that the student gets a working knowledge in Fourier analysis. While doing this, for telecommunication engineering formation important Fourier transform theorems like "modulation, delay, convolution" are emphasized. Modulation methods used in communication systems are investigated systematically. While investigating each modulation method, examples are given from telecommunication systems which are using this method, aiming the student to train both in theory and applications.
Dersin Süresi	1 semester (3 hours per week)
Eğitim Dili	English
Ön Koşul	None
Önerilen Kaynaklar	<ul style="list-style-type: none">- Communication Systems, An Introduction to Signal and Noise in Electrical Communication, 5th edition, A.B. Carlson, P.B. Crilly, J.C. Rutledge, Mc Graw Hill.- An Introduction to Analog and Digital Communications, 2nd edition, S. Haykin, M. Moher, Wiley.
Dersin Kredisi	3
Laboratuvar	None
Diğer-1	