



King Fahd University of Petroleum and Minerals
Department of Electrical Engineering
EE 370 Communication Engineering
Semester 061

Rules and Regulations

1. University regulations regarding attendance are enforced. Only official excuses will be accepted and must be submitted no later than the third lecture after the excused absence.
2. All quizzes are counted towards your final grade. **NO MAKEUP QUIZZES WILL BE GIVEN FOR ANY REASON.** If you have an **OFFICIAL** excuse for missing a quiz, your quiz grade will be the average of the other quizzes.
3. Cheating in quizzes, exams, or the final exam will result in failing the course.

Wk	Da y	Date	Topics	Text	HW Problems	Laboratory/Tutorial
1	S	9 Sep	Introduction: Com. Systems, Signal Classifications and Operations, Unit Impulse Function, Review of Trigonometric and Exponential Fourier Series. Normal Saturday Classes	1, 2.1 – 2.4, 2.8 – 2.9	2.1-4, 2.3-3, 2.4-1(a,e), 2.8-4(c), 2.9-1(b), 2.9-3	No Lab
	M	11 Sep				
	W	13 Sep				
	Th	14 Sep				
2	S	16 Sep	Review of Fourier Transform, Properties of FT, Convolution, Linear Time-invariant Systems, Ideal and Practical Filters (LPF and BPF)	3.1 – 3.5	3.1-4(b), 3.1-6(b), 3.3-6(a), 3.3-7(b), 3.4-1	Review Session: Fourier Series & Transform
	M	18 Sep				
	W	20 Sep				
Saturday, 23 September, National Holiday						
3	M	25 Sep	Baseband and Carrier Communication, Amplitude Modulation (AM), Double Sideband Suppressed Carrier (DSBSC)	4.1 – 4.3	4.2-1, 4.2-4, 4.2-8, 4.3-1, 4.3-2	No Lab
	W	27 Sep				
4	S	30 Sep	Quadrature Amplitude Modulation (QAM), Hilbert Transform, Single Sideband Modulation (SSB)	4.4 – 4.5	4.4-1, 4.5-3, 4.5-5	Exp. # 1 – Part a: Fourier Series (Matlab)
	M	2 Oct				
	W	4 Oct				
5	S	7 Oct	Vestigial Sideband (VSB) Modulation, Carrier Acquisition, Superhetrodyne AM Receiver	4.6 – 4. 8	4.6-1, 4.8-1, 4.8-2	Exp. # 1 – Part b: Fourier Transform (Matlab)
	M	9 Oct				
	W	11 Oct				
Eid Al-Fitr Vacation						
6	S	28 Oct	Angle Modulation: Instantaneous Frequency, Frequency Modulation (FM) and Phase Modulation (PM). Bandwidth of Angle Modulated waves	5.1 – 5.2	5.1-1, 5.1-3, 5.2-1, 5.2-3	Exp. # 2: Analog Communication Board (ACB)
	M	30 Oct				
	W	1 Nov				

Major Exam I						
7	S M W	4 Nov 6 Nov 8 Nov	Wide-band FM, Generation of FM Waves	5.2 cont. – 5.3	5.2-4, 5.2-5, 5.2-6, 5.3-1, 5.4-2	Exp. # 3: AM (Matlab)
8	M W	11 Nov 13 Nov 15 Nov	Demodulation of FM, Phase-Locked Loop (PLL), FM Receiver, Stereo FM	5.4, 5.6		Exp. # 4: DSB-SC & AM (ACB)
9	S M W	18 Nov 20 Nov 22 Nov	Sampling Theorem, Signal Reconstruction	6.1	6.1-1, 6.1-2(a, b, c, d, e), 6.1-3, 6.1-4, 6.1-5	Exp. # 5: FM (Matlab) Quiz 1
10	S M W	25 Nov 27 Nov 29 Nov	Digital Modulation, Pulse Code Modulation (PCM), Uniform and Non-uniform Quantization	6.2.1, 6.2.2	6.2-1, 6.2-2, 6.2-3, 6.2-4	Exp. # 6: FM (ACB)
11	S M W	2 Dec 4 Dec 6 Dec	T1 Carrier System, Differential Pulse Code Modulation, Delta Modulation	6.2.4 – 6.4	6.2-5, 6.2-6, 6.2-8, 6.2-9	Exp. # 7: Sampling & Quantization (Matlab)
12	S M W	9 Dec 11 Dec 13 Dec	Digital Communication systems, Line Coding	7.1-7.2	7.2-1, 7.2-2, 7.2-3	Exp. # 8: PAM (DCB)
Major Exam II						
13	S M W	16 Dec 18 Dec 20 Dec	ISI and Pulse Shaping	7.3	7.3-1, 7.3-2, 7.3-4, 7.3-5	Exp. # 9: PCM and TDM (DCB)
Eid Al-Adha Vacation						
14	S M W	6 Jan 8 Jan 10 Jan	M-ary Communication, Digital Carrier Systems	7.7-7.8, 7.9	7.7-3, 7.8-1, 7.9-2	Exp. # 10: Channel Effects (DCB) Quiz 2
15	S M W	13 Jan 15 Jan 17 Jan	Topics in communication technologies, Review	Selected topics		Lab Exam
16						
Final Exam						