



العدد :

التاريخ : / / ٢٠

Course number and name	EE 3400: Communication System
Credits and contact hours	3 credits and 4 hours
Course coordinator	
Textbook	Communication Systems ,5 th edition, Carlson, 2010. Matlab & Simulink, Mathworks, 2010
Course Information	a. Prerequisites: EE 3120 Probabilistic Methods of Signals and System Analysis b. Selective Elective
Topics to be covered	–Review of selected topics from Fourier transforms, linear systems, convolution and Filtering –Introduction to communication system/ transmitter, modulation, channel, receiver, demodulation –Amplitude Modulation (AM, AM-DSB/ SC, power and bandwidth calculations, SSB, VSB, FDM, AM spectrum, AM generation – square law product, switching modulator, balanced modulator, AM transmitter principles, AM detection methods) –Phase and Frequency Modulation (power and bandwidth calculations, spectrum, FM and PM generation methods, FM and PM detection) –Noise in analog modulation –Pulse modulation/ sampling theorem, PAM, PCM, PPM, PWM, TDM