

UNIVERSITY OF CENTRAL FLORIDA
SCHOOL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
EEL 4515: Digital Communication Systems
FALL SESSION 2004

Lecture Time: M W F 11:30-12:20
Lecture Room: ENG 383
Pre-Requisites: EEL 3552 Analog and Digital Communication Fundamentals
Textbook: Digital Communications, *John G. Proakis, McGraw-Hill High Education, 4th edition.*
References: Digital and Analog Communication Systems, *6th edition, Leon W. Couch*

Instructor: Burak BERKSOY
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Office Hours: M W 9:30-11:30
Office: ENG-I 361 (Miniature Systems Eng. Lab.)

Class Web Site: <http://pegasus.cc.ucf.edu/~bberksoy>

Grading:	HW	%20	A	%90 and up
	Project	%10	B	%80-89
	Midterm	%20	C	%70-79
	Final	%25	D	%60-69
	Lab	%20	F	%59 and below
	Attendance	%5		

Homework: There will be 4 homework assignments given when new material is covered. Homework will be due 1 week from the day it is assigned. Students will have two assignments returned to them before each exam.

Project: There will be one individual project assigned to students towards midterm. The project will involve use of Matlab and will test the student's ability to use their digital communications knowledge in practice.

Exams: There will be two exams during the semester. Exams will test student on their theoretical knowledge of major topics. There will be a review session before each exam.

Lab: Lab sessions will be conducted independently by a separate individual.

Course Outline:

- 1) Introduction
- 2) Source Encoding
- 3) Characterization of Communication Signals and Systems.
- 4) Optimum Receivers for Additive White Gaussian Noise Channel
- 5) Channel Capacity and Coding
- 6) Signal Design for Band-Limited Channels