

2013 Scanning Sheet. Assignment Description: _____ Instructor: _____ Date: _____ Scanned File Name: _____

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EE 353 Communication Systems Engineering (3) - Outcomes Reviewed 2013
A	B	C	D	E	F	G	H	I	J	K				
2		1		2			1			1			1	Understand the basics of a communication system.
2				1			1			1			2	Learn how signals are compared in terms of correlation coefficients.
2		1		1			1		2	1			3	Apply autocorrelation function and its applications in Radar and communications.
2		1		1			1		2	1			4	Verify Parseval's theorem for energy and power signals.
2		1		1			1		2	1			5	Assess energy and power spectral densities
2		1		1			1		2	1			6	Evaluate the essential bandwidth of practical signals
2	2	2		1			1		2	1			7	Interpret the importance of modulation process in communications
2		1		2			2		2	1			8	Gain knowledge about Amplitude Modulation ,and AM radio receivers
2		1		2			1		2	1			9	Analyze Frequency and Phase Modulation Schemes and Systems, including FM receivers.
2													10	Understand the applications of PLL (Phase Locked Loop) for frequency tracking and for FM demodulation.
2		1		2			2		1				11	Analyze the importance of sampling theorem
2		1		2			2		1	1			12	Analyze Pulse code Modulation Schemes and PCM systems.
2													13	Evaluate appropriate line codes for digital communications
2		1		1			2		1	1			14	Evaluate the trade offs between S/N Ratio and Bandwidth for digital communications
2		1		1			2		1	1			15	Evaluation of power spectral density of various line codes for practical line code for applications
2		1		2			2		1	1			16	Evaluate the reasons for Image frequency in communication systems.

1=supporting contribution
2=significant contribution

Rubric

- 5: Excellent Mastery of Outcome By Vast Majority of Students
- 4: Good Mastery of Outcome By Vast Majority of Students
- 3: Adequate Mastery of Outcome By Majority of Students
- 2: Marginal Mastery of Outcome By Most Students
- 1: Lack of Mastery of Concept By Most Students

Improvement Suggestions or Comments:

a. an ability to apply knowledge of mathematics, science, and engineering
b. an ability to design and conduct experiments, as well as to analyze and interpret data
c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as
d. an ability to function on multi-disciplinary teams
e. an ability to identify, formulate, and solve engineering problems
f. an understanding of professional and ethical responsibility
g. an ability to communicate effectively
h. the broad education necessary to understand the impact of engineering solution in a global, economic,
i. a recognition of the need for, and an ability to engage in life-long learning
j. a knowledge of contemporary issues
k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice