

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

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EE 350 Engineering Electromagnetics (3) – Outcomes Reviewed 2013
A	B	C	D	E	F	G	H	I	J	K				
2				2			1						1	Evaluate vector quantities in any 3-dimensional coordinate system.
2				2			2	1					2	Apply the concepts and laws pertaining to Electrostatics, and the solution of electrostatics problems, and polarization of materials.
2				1			2	1					3	Analyze steady electric currents.
2				2			1	1					4	Evaluate steady magnetic fields, and magnetization of materials.
2				2			2	1					5	Understand time varying fields and Maxwell's equations.
2				2			2	1					6	Analyze and evaluate plane electromagnetic wave propagation.
2				2			2	1					7	Understand and analyze the wave propagation through transmission lines for power delivery.
2	1			1			1	1					8	Apply Smith chart use for solution of transmission line problems and impedance matching.
2				2			2	1					9	Understand the basics of wave guides.
2				1			1	1					10	Understand the basics of polarization effects on plane waves.
2				1			1	1					11	Acquire the basic understanding of how an antenna radiates power over a long distance.

1=supporting contribution
2=significant contribution

Rubric	
5: Excellent Mastery of Outcome By Vast Majority of Students	a. an ability to apply knowledge of mathematics, science, and engineering
4: Good Mastery of Outcome By Vast Majority of Students	b. an ability to design and conduct experiments, as well as to analyze and interpret data
3: Adequate Mastery of Outcome By Majority of Students	c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
2: Marginal Mastery of Outcome By Most Students	d. an ability to function on multi-disciplinary teams
1: Lack of Mastery of Concept By Most Students	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, environmental, and societal context
Improvement Suggestions or Comments:	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