

2014 Scanning Sheet. Assignment Description: _____ Instructor: _____ Date: _____ Scanned File Name: _____

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EE 474 Power Electronics (4) - Outcomes Revised 2014
A	B	C	D	E	F	G	H	I	J	K				
				2						1			1	Understand the electrical characteristics and operation of semiconductor power switching devices.
		2		1						1			2	Specify supplementary components and circuits for semiconductor power switches.
				1						1			3	Understand the principles and methods of electrical power conversion and control.
	2	2		1						1	1		4	Analyze and design AC-DC, DC-DC, AC-AC, and DC-AC converters.
	1												5	Understand the basic building blocks of switched-mode DC power supplies.
	1			2									6	Analyze and design basic DC-DC converters used in switched-mode power supplies.
	1	2	2	1									7	Conduct laboratory experiments on static power converters and controllers.
	1			2				1					8	Use computer-based tools to simulate and analyze power electronic 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	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 economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
	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, environmental, and societal context
	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

Improvement Suggestions or Comments:
