

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

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EET 455 Power Electronics (3) – Outcomes Revised 2013
A	B	C	D	E	F	G	H	I	J	K				
2	1	1	1		1								1	Understand the electrical characteristics of modern power semiconductor devices under steady-state and switching conditions.
2	1	1	1		1								2	Understand supplementary circuits used with power electronic devices including drive circuits, snubbers, heat sinks and protection devices.
2	1	2	1	1	1								3	Understand the topologies, operation and performance analysis of single-phase AC and DC converters using power semiconductor switches.
2	1	1	1		1								4	Understand the topologies, operation and performance analysis of three-phase AC and DC converters using power semiconductor switches.
1	1												5	Understand the basic building blocks of regulated DC switched-mode power supplies (SMPS) and isolated DC-DC converter circuits used in SMPS.
		1			1								6	Use computer-based modeling and simulation tools to simulate and analyze the performance of power electronic converters.

1=supporting contribution

2=significant contribution

<p>Rubric</p> <p>5: Excellent Mastery of Outcome By Vast Majority of Students</p> <p>4: Good Mastery of Outcome By Vast Majority of Students</p> <p>3: Adequate Mastery of Outcome By Majority of Students</p> <p>2: Marginal Mastery of Outcome By Most Students</p> <p>1: Lack of Mastery of Concept By Most Students</p>	a.	an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly defined engineering technology activities
	b.	an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies
	c.	an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes
	d.	an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives
	e.	an ability to function effectively as a member or leader on a technical team
	f.	an ability to identify, analyze, and solve broadly-defined engineering technology problems
	g.	an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature
	h.	an understanding of the need for and an ability to engage in self-directed continuing professional development
	i.	an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity
	j.	a knowledge of the impact of engineering technology solutions in a societal and global context; and
	k.	a commitment to quality, timeliness, and continuous improvement.

Improvement Suggestions or Comments: