

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

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EE 467W Principles of Engineering Design III (1)
A	B	C	D	E	F	G	H	I	J	K				
													1	Understand the basic components of feasibility studies.
		1											2	Prepare project specifications.
		1							1	1			3	Develop designs using design for test methods.
		1		1									4	Conduct "brain storming sessions" to support design efforts.
					1								5	Understand the significance and types of "intellectual property".
		2	2	2									6	Implement a design based on analog, digital and microprocessor systems with Programmable Logic.
		2	2	2	1								7	Function on interdisciplinary design teams to complete a project and develop assessment skills for evaluation of team members.
		2	2	1									8	Implement designs with adherence to real world constraints – in EE 467 these constraints will be mainly created by the course instructor
							2						9	Demonstrate appropriate verbal communication skills through project presentations.
1							2						10	Students will learn about appropriate project documentation including: Engineering Change Orders, Project Budgets, Project Plans, Testing Plans, Specifications, and Final Project Reports. Students will prepare examples of these based on designs of others.
					2		2		2				11	Present, analyze and critique ethics scenarios.
										1			12	Prepare an appropriate engineering notebook.
											2		13	Use "tools" that are appropriate to the practice of engineering to include CAE tools for schematic capture, printed circuit board layout and circuit simulation as well as tools associate with "soft engineering" such as word processors and spreadsheets.

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:	