

2014 Scanning Sheet. Assignment Description:

Instructor:

Date:

Scanned File Name:

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EE 477W Principles of Engineering Design IV (1) - Outcomes Revised 2016
A	B	C	D	E	F	G	H	I	J	K				
		2	2	2							2		1	Design and implement a design based on analog, digital and microprocessor systems must include programmable logic.
			2										2	Function on interdisciplinary design teams and develop assessment skills for evaluation of team members.
		2	2	2									3	Complete designs with adherence to real world constraints
						2							4	Demonstrate appropriate verbal communication skills through project presentations.
		2				1							5	Demonstrate appropriate written communication skills through project documentation including: Engineering Change Orders, Project Budgets, Project Plans, Testing Plans, Specifications, and Final Project Reports
1		2				1							6	Manage design and development of projects.
					2		2	2	2				7	Present, analyze and critique ethics scenarios.
												1	8	Prepare an appropriate engineering notebook.
		1				1							9	Evaluate and document software and hardware trade offs.
													10	Design and have manufactured printed circuit boards.
												2	11	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.
							2						12	Understand the impact of engineering solution in a global, economic, environmental, and societal context.
								2					13	Recognize the need for, and ability to engage in life-long learning.
												2	14	Understand contemporary issues.

1=supporting contribution

2=significant contribution

Rubric	a. an ability to apply knowledge of mathematics, science, and engineering
5: Excellent Mastery of Outcome By Vast Majority of Students	b. an ability to design and conduct experiments, as well as to analyze and interpret data
4: Good Mastery of Outcome By Vast 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
3: Adequate Mastery of Outcome By Majority of Students	d. an ability to function on multi-disciplinary teams
2: Marginal Mastery of Outcome By Most Students	e. an ability to identify, formulate, and solve engineering problems
1: Lack of Mastery of Concept By Most Students	f. an understanding of professional and ethical responsibility
	g. an ability to communicate effectively
Improvement Suggestions or Comments:	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