

2013 Scanning Sheet. Assignment Description:

Instructor:

Date:

Scanned File Name:

ABET Outcomes											Rubric or student %	Example problem	J K		
A	B	C	D	E	F	G	H	I	J	K	Outcome #	EE 336 Principles of Engineering Design I (1) – Outcomes Revised 2013			
			2		1	2			1		2	1	Develop skills to successfully function in a design team.		
	1	2									2	2	Learn the basic elements of engineering design and project management.		
	2			2								3	Demonstrate competence with design and troubleshooting tools such as oscilloscope, soldering iron, logic analyzer.		
	2					2						4	Learn the use of software-based documentation and project management tools and maintain an appropriate engineering notebook.		
			1			1	1	1			1	5	Prepare complete project proposals, including project objectives, bill of materials, project schedule, and deliverables.		
1	1	1		1						2	2	J1	6	Learn to purchase components and track delivery from distributor websites	
1	1	1		1							2	2	J2	7	Learn to obtain manufacturer's data sheets and application notes and be able to interpret and use these for your design project.
1	1	1										2	K1	8	Select, construct and verify a microcontroller system complete with input and output interface circuits and devices such as digital inputs and outputs, analog inputs and outputs, and timing circuits.
1	1	1										2		9	Correctly wire circuits on a breadboard and install suitable connectors.
1	1	1										2	K2	10	Learn to trouble shoot microcontroller hardware and verify embedded software systems.
1		1										2		11	Layout a printed circuit board.

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 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: