

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

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EET 340 Programmable Hardware Technology (4) - Outcomes Reviewed 2013
A	B	C	D	E	F	G	H	I	J	K				
2													1	Describe combinatorial circuits using a hardware description language (HDL) such as Verilog.
2			2										2	Design sequential circuit using Mealy and Moore model.
2	2		2										3	Use three different modeling styles including data flow, structural, and behavioral to describe a specified circuit.
2	2		2										4	Describe sequential circuits using a chosen HDL.
2	2		2										5	Use hierarchical approach to design complex digital circuit (structural style will be used).
2	2	1											6	Write a testbench to simulate the circuit described in HDL.
			2										7	Use software tools provided by a vendor such as Altera to compile the HDL description of a combinatorial or sequential digital circuit.
2	2	1											8	Make pin assignment using the software tool when necessary so that signal pins can be routed to appropriate I/O devices such as LEDs, 7-seg. Displays, and switches.
			2		2								9	Download the output from the software tools (after compiling the HDL file) onto the FPGA chip contained in a FPGA demo kit.
			2			1							10	Wire the I/O signals on the FPGA demo kit and verify the circuit operation after the FPGA is configured with the downloaded file.

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 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:		