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

ABET Outcomes											Rubric or	Example		
A	B	C	D	E	F	G	H	I	J	K	student %	problem	Outcome #	**EE 395 Computer Hardware and Organization (3) - Outcomes Revised 2013**
2	2		2										1	Use HDL such as Verilog to describe combinatorial and synchronous circuits.
2	2												2	Use the HDL test bench to verify HDL descriptions for combinatorial and synchronous circuits.
2	2		2										3	Design ALU subcircuits such as addres, subtractors, comparators, shifters and rotators.
2	2		2										4	Build multipliers, divisors, counters, shift registers, memory arrays.
2													5	Familiar with IEEE std. floating number representation methods.
2	2												6	Use commercial processor instruction set such as MIPS to explore implementation of high level constructs, functions and function calls.
1	1												7	Design single-cycle procesor datapath and its control. Analyze performance of single-cycle processor.
1	1												8	Design multiple-cycle processor data path and control and analyze performance of multi-cycle
1	1												9	Design pipelined processor data path and control, and deal with hazards.
2	2												10	Use memory hierarchy to improve memory system performance and reduce cost.
2	2												11	Explain cache memory system parameters.
2	2												12	Explain functions and operations of a memory management unit.

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

Improvement Suggestions or Comments:

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