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

A	B	C	D	E	F	G	H	I	J	K	Rubric or student %	Example problem	Outcome #	EE 230 Circuit Analysis I (3) – Reviewed 2013
								ABET Outcomes						
2													1	Analyze series and parallel DC and AC circuits using Ohm's law, Kirchoff's current Law, Kirchoff's voltage law.
2													2	Utilize impedance and admittance parameters in circuit analysis.
2													3	Simplify DC and AC circuits using the current divider and voltage divider circuit.
2													4	Analyze DC and AC circuits, with more than one independent source, using node voltages, mesh currents and superposition.
2				1									5	Calculate voltages, currents, power, energy in DC and AC circuits.
1													6	Recognize the differences between dependent and independent sources.
2				1									7	Simplify DC and AC circuit analysis using course transformations, Thevenin equivalent circuits and Norton equivalent circuits.
2													8	Recognize when power is being absorbed or delivered in DC and AC circuits.
1													9	Understand the condition where maximum power transfer occurs in DC and AC circuits.
2				1									10	Understand the concept of amplification and have the ability to analyze operational amplifier circuits; calculating output/input voltages for invert-ing amplifier, summing amplifier, non-inverting amplifier and difference amplifier circuits.
2													11	Understand the physical characteristics, mathematical expressions and energy relationships for resistors, inductors, and capacitors in DC and AC circuits.
2													12	Understand the concepts, mathematical representations and differences between mutual inductance and self inductance.
2													13	Analyze the transient responses (current and voltages) in series and parallel R-L and R-C circuits.
2													14	Analyze the transient and step response for RL and RC circuits.
2													15	Determine the sinusoidal steady state response (voltage, current, power) for AC circuits.

1=supporting contribution

2=significant contribution

Rubric	
	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
5: Excellent 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
4: Good Mastery of Outcome By Vast Majority of Students	d. an ability to function on multi-disciplinary teams
3: Adequate Mastery of Outcome By Majority of Students	e. an ability to identify, formulate, and solve engineering problems
2: Marginal Mastery of Outcome By Most Students	f. an understanding of professional and ethical responsibility
1: Lack of Mastery of Concept By Most Students	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