

Inter American University of Puerto Rico
Bayamón Campus
School of Engineering
Electrical Engineering Department

ELEN 3301 — Electric Circuits I

Class Information

- Professor: José Oscar Mur Miranda, jomur@bc.inter.edu
Office: G131, office hours will be held Tuesday at a time TBA
Lecture: Wednesday, 6pm-7:20pm, 7:30pm-8:50pm, G120
Laboratory: Monday, 6pm-8:50pm, G224
Text: James W. Nilsson & Susan A. Riedel, *Electric Circuits*, 6th Edition, Prentice Hall 2001
Webpage: A class webpage will contain the material of the class. The URL will be announced in class.
Problem sets: A new problem set will be posted on the website of the class every Wednesday and will be due in class next Wednesday. The final grade will be based heavily on problem sets. Collaboration is allowed, but not encouraged. The work submitted must be your own. PS16 is an optional review set. The lowest three problem set grades will be discarded.
Laboratories: Laboratories will be posted on the website of the class. Laboratories will be graded pass/fail. You must pass twelve laboratories to pass the laboratory component.
Grading: The final score will be based according to the following distribution:
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|--------------|-----|
| Problem sets | 60% |
| Quiz 1 | 10% |
| Quiz 2 | 10% |
| Final | 20% |
- Assignment of grades will be based on the final score and the professor's assessment of the effort and understanding of the material in a case-by-case basis.

Syllabus:

August	16	Monday			Introduction
	18	Wednesday	PS1 out		Diagnostic Quiz
					Kirchhoff's laws
					Current & voltage dividers, parallel & series combinations
	23	Monday	Lab 1		
	25	Wednesday	PS2 out	PS1 in	Node method
					Loop method
	30	Monday	Lab 2		
September	1	Wednesday	PS3 out	PS2 in	Superposition & linearity
					Thevenin & Norton equivalents

	6	Monday			No class
	8	Wednesday			Dependent sources
	13	Monday	Lab 3		
	15	Wednesday		PS4 out PS3 in	Quiz 1
	20	Monday	Lab 4		
	22	Wednesday		PS5 out PS4 in	RC homogeneous response RC step response
	27	Monday	Lab 5		
	29	Wednesday		PS6 out PS5 in	RL homogeneous response RL step response
October	4	Monday	Lab 6		
	6	Wednesday		PS7 out PS6 in	First-order impulse response Integration and differentiation in linear systems
	11	Monday	Lab 7		
	13	Wednesday		PS8 out PS7 in	LC homogeneous response LC step & impulse responses
	18	Monday	Lab 8		
	20	Wednesday		PS9 out PS8 in	RLC homogeneous response RLC step & impulse responses
	25	Monday	Lab 9		
	27	Wednesday		PS10 out PS9 in	Sinusoidal steady-state
November	1	Monday	Lab 10		
	3	Wednesday		PS11 out PS10 in	Impedance & admittance
	8	Monday	Lab 11		
	10	Wednesday		PS12 out PS11 in	Quiz 2
	15	Monday	Lab 12		
	17	Wednesday		PS13 out PS12 in	Phasors & power circuits
	22	Monday	Lab 13		
	24	Wednesday		PS14 out PS13 in	Operational amplifier (opamp)
	29	Monday	Lab 14		
December	1	Wednesday		PS15 out PS14 in	Operational amplifier (opamp) continued
	6	Monday			Review
	8	Wednesday		PS16 out PS15 in	Review
	13-17		Final's Week		Final Exam