CALIFORNIA STATE UNIVERSITY

SACRAMENTO

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

SYLLABUS
EEE 117

Network Analysis, 3 unit
Spring 2022, Section 2, Call No. 37053, Tues. & Thur. 1:30 – 2:45 P.M.
Online Instructions via Zoom
Lectures URL: https://csus.zoom.us/j/88278282245

Instructor: Riaz Ahmad
Email: ra2293@csus.edu

Help Session: Fridays - 1:00 p.m. to 4:00 p.m.
Online help via Zoom
Help Sessions URL: https://csus.zoom.us/j/81828619035

Motivation of this course

Provide in-depth knowledge to students

Course Content: Review of basics, Sinusoidal steady state, phasors, complex power, mutual inductance, series and parallel resonance. Introduction to application of Laplace transforms in network analysis, transfer functions, Bode plots, Fourier series. Three-Phase Systems.

Prerequisite: ENGR 17, Math 45 and Physics 11C
Basic concept of electric and magnetic circuits.

Textbook: Electric Circuits, Nilsson and Riedel, 9th,10th or 11th Edition, Prentice Hall.

Reference Material: Instructor's notes.

Very Important: All the Home works and Exam's submissions **MUST** be handwritten by students. Each student will need to upload the solutions in canvas containing all the procedures and calculations on or before the due date. Late submissions will be subjected to penalty, which will be 15% reduction from the total points.

Plagiarism Policy: All home works will be furnished individually. However, it is expected and encouraged that student help each other with the concepts and the data gathering/analyzing stages. The standards of the university on plagiarism are published and will be enforced.
For any first occurrence of potential plagiarism, both submissions will receive zero score since I have no way of knowing which one was the "master" and which was the "copy". On a second occurrence, the case will be submitted to Academic Affairs for disciplinary action.

Attendance: Attendance is very important and will be noted for every session.

Grading Policy: The HomeWorks and Exams are the basis for the grades.

Home Work	Midterm I	Midterm II	Final	Combined
30%	20%	20%	30%	100%

Grades	% age
A	**93-100**
A-	**90-92**
B+	**87-89**
B	**83-86**
B-	**80-82**
C+	**77-79**
C	**73-76**
C-	**70-72**
D	**60-69**
F	**Below 60**

It means: 89.4 —-> B^+ 89.6 —-> A^- 89.5 —-> A^-

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EEE 117 - Section 2- Tuesday & Thursday 1:30 to 2:45 PM - Spring 2022

Week	Lecture Set	Topic	Date	H.W	Due Date
1	1	Introduction, Syllabus and Policies	01/25	HW 1	02/07
		Sinusoidal Steady State Analysis	01/27		
2		Mutual Inductance & Transformer	02/01		
			02/03		
3	2	Sinusoidal Steady State Power Analysis	02/08	HW 2	02/21
			02/10		
4			02/15		
			02/17		
5		Review for Midterm I	02/22		
		Midterm I	02/24		
6	3	Laplace Transformation	03/01	HW 3	03/14
		Inverse Laplace	03/03		
7			03/08		
			03/10		
8	4	Laplace Transformation in Circuit Analysis	03/15	HW 4	04/06
			03/17		
9		Spring Break	03/22		
			03/24		
10		Bode Diagram	03/29		
		Campus Closed	03/31		
11		Bode Diagram	04/05		
11		Review for Midterm II	04/07		
12		Midterm II	04/12		
12	5	Frequency Selective Circuits	04/14	HW 5	04/25
13		Active Filter Circuits	04/19		
			04/21		
14	6	Fourier Series	04/26	HW 6	05/09
		Balanced Three Phase System	04/28		
15			05/03		
			05/05		
16		Review for Final	05/10		
			05/12		
17		Finals	05/17		
			05/19		