



# STARK STATE COLLEGE

## GENERAL SYLLABUS

### Course Information

**Course Name:** PLCS and Industrial Controls II  
**Course Number:** EET228

### Required Materials

**Textbook(s):** None  
**Required Readings:** None  
**Additional Materials:** Slides, video links and other materials through LMS

### Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Chapter/Topic/Lab
1	Chapter 13-Overview/DC Circuits Review/AC Intro, Lab 1: Complex Math/Phasors
2	Chapter 13-Sinewaves-Average/RMS/Phasors
3	Chapter 14-Phasors, Ohm's Law, Reactance, Lab #2:Oscilloscope
4	Chapter 15-Reactance/Series AC Circuits, Lab #4:RLC (passive) Components/Reactance
5	Chapters 16&17-Parallel AC Circuits/Series-Parallel, Exam I
6	Chapters 16&17-Lab#5: Frequency Response/Reactance, Lab#6: RL-Frequency Responses
7	Chapter 18-Mesh/Nodal, Delta-to-Y, Bridge, Lab#8: Phase Measurements
8	Chapter 19-Network Theorems: Thevenin's/super/max power, Lab#11: Series-Parallel Sinusoidal Circuits
9	Chapter 20-Review/AC Power, Exam II
10	Chapter 20-AC Power:Reactive, Apparent, Real, Power Factor, Lab #13 Thevenin's/ Power Max
11	Chapter 21&22-Resonance/Bode/Decibels/Filters, Lab#14: Series Resonant
12	Chapters 21&22-Lab#17: Passive Filters, Chapter 23-Transformers (ideal)
13	Chapter 23-Transformers (auto, tapped,real (lossy)/nameplate), Lab #19:Transformers
14	Chapter 24-Polyphase (3-phase), Exam III
15	Chapter 25-Oulse/Non-Sinusoidal, Lab#21: Balanced Three Phase
16	Final Exam