EE 213 : Basic Circuit Analysis II

Credits: 4
Class Hours: 3 lecture and 3 lab
Prerequisites: "C" or higher EE 211. "C" or higher or concurrent enrollment in MATH 244.
Description: This course studies Laplace transforms, Fourier transforms, convolution and the applications to circuits, frequency selective circuits, design of active filters, and state space analysis of circuits.
Semester Offered: Fall, Spring
Course Student Learning Outcomes (CSLOs):

1. Perform nodal, loop, and state formulations and analysis of sinusoidal steady state circuits.
2. Represent circuit responses in terms of sinusoidal phasor notation, Laplace transformations, convolutional determination, and Fourier representations.
3. Design simple filters including a Butterworth filter.
4. Build and measure circuits, and work in a team.
5. Write clear and complete laboratory reports.
6. Apply Matlab or similar math analysis software to analyze and design circuits.