**BMEN6371 - Bioelectric Systems**

**BMEN 6371** Bioelectric Systems (3 semester credit hours) Introduction to the theoretical and applied aspects of bioelectrical phenomena spanning cells to tissue. Beginning with a quantitative understanding of the basis of electrical excitability, the course covers bioelectrical signal propagation, the physical basis of extracellular potentials and stimulation, biopotential amplifier design and use, and clinically relevant biosignal acquisition and analyses. Prerequisites: Graduate standing and department consent required. (3-0) Y