BMEN6395 - Advanced Topics in Neuroscience for Engineers

**BMEN 6395** Advanced Topics in Neuroscience for Engineers (3 semester credit hours) The purpose of this course is to explore principles of neural systems. An emphasis will be placed on the coding of neural information, neural plasticity in response to learning and injury, and considerations for engineering strategies to interface with the neurons system. Topics will include network and synaptic plasticity, timing, reward prediction, and coding of motor information. The course format will be a review of classical and emerging studies. Background knowledge of basic neuroscience is strongly encouraged. (3-0) R