

Module 1: Bio signals and physiological modelling

Introduction to Bio signals at various functional levels -Electrophysiology - Excitable and non-excitable cells- Origin of bio potentials-Bio potentials- electrodes, amplifiers, single cell, group and surface-Measurements specific reference to EEG, ECG, EMG etc - Introduction physiological modelling –discussion with examples

Class Schedule:

1. Introduction to Bio signals at various functional levels
2. Electrophysiology - Excitable and non-excitable cells- Origin of bio potentials
3. (Action potential) Bio potentials- electrodes, amplifiers, single cell, group and surface
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6. Measurements specific reference to ECG, etc
7. Measurements specific reference to EEG, etc
8. Measurements specific reference to EMG etc
9. Introduction physiological modelling –discussion with examples
10. Introduction physiological modelling –discussion with examples