

PENNSYLVANIA STATE UNIVERSITY



IE 553

Engineering of Human Work

Dr. Andris Freivalds

Class #10

PENNSSTATE



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Electromyography (EMG) – 7

Measurement/Instrumentation

- Electrodes: Ag-AgCl, bipolar vs. unipolar
- Preamplifier: \uparrow input impedance, \uparrow SN ratio
- Amplifier:
 - \uparrow common mode rejection ratio
 - Bandwidth: 10-1,000 Hz
 - Variable gain (1 V for AD input)
 - Fuse: current limiting
 - Portable, not expensive