EE-C145L_F'08 Outcomes List – Stephen Derenzo

1. To be able to amplify signals from sensors that have low-level, differential, high impedance outputs.
2. To learn about noise sources and how to use shielding, grounding, and analog filtering to enhance the signal-to-noise ratio.
3. To learn the properties of a number of useful sensors for measuring position, temperature, strain, force, light, ionic potentials, biological signals, ionizing radiation, etc.
4. To be able to design instrumentation that senses desired quantities, transduces to an electrical signal, and amplifies and filters that signal for interfacing to a microcomputer.
5. To be able to design simple analog control systems, using sensors, amplification, filtering, controller circuits, power amplifiers, and actuators.
6. To make analog circuits work (design and debugging).
7. To write clear, concise, informative laboratory reports.