WEEK 1 NO LAB (1/2 week only)

WEEK 2 LAB 1: Equipment Review – upgraded from before to include:

  Thevenin Equiv ckt from amps & filters lab  
  
    Intro power sply, func ge, mm, o-scope  
    push FFT button -> interpret freq. content of signal; what freq. peak represents HR  
    passive RC filters

Maybe include a wheatstone bridge ckt?

WEEK 3 LAB 2: Soldering LCD Shield – let students start on lab 3 if ahead

WEEK 4 LAB 3: display ECG (from fnc generator) in a user-choice way (open-ended "signal content")  
    Goal: use the Arduino to do something w/ an ECG signal

WEEK 5 LAB 4: OP AMP Lab – modified from last year: inverting and non-inverting, i/o impedance demo; buffers

WEEK 6 LAB 5: OP Amp lab – active filters – bpf; operate on sim. Ecg signal again w/added noise

WEEK 7 NO LAB

WEEK 8 LAB 6: Arduino Incubator

WEEK 9 NO LAB

WEEK 10 SPRING BREAK

WEEK 11 LAB 6: Biopotential Amplifier & ECG Measurements (Arduino??)

WEEK 12 LAB 7: Blood Pressure Measurement (Arduino)

WEEK 13 LAB 8: Pneumotachometer / Spirometry (Arduino)

WEEK 14 FINAL PROJECT: Pulse Plethysmography (Arduino)

WEEK 15 FINAL PROJECT

WEEK 16 FINAL PROJECT

WEEK 17 FINALS WEEK