

100 pts Project #1 Simulation: (Hand in to homework locker by due date)

100 pts PSPICE:

- 20 pts 1. Printout of schematic with the correct circuit.
- 20 pts 2. Plots of V_o (both rails):(include annotations).
- 20 pts 3. Plots of current.
- 20 pts 4. Plot of voltage ripple.
- 20 pts 5. Table & other verification printouts to verify operation:
 - 4 pts Power dissipated through each component
(to make sure that you will not “blow” up a component).
 - 4 pts Relevant internal currents to verify correct operation.
 - 12 pts V_{Omin} , V_{Omax} , I_L (load current to verify correct operation).

100 pts Project #1 Lab Work: Get this checked by your TA

25 pts NOTEBOOK:

- 5 pts 1. Check that their lab notebook is organized.
- 5 pts 2. Description of the project.
- 5 pts 3. Description of the design work.
- 10 pts 4. Design Work:
 - 3 pt Schematic of the circuit (PSpice printout or drawn out by hand).
 - 4 pts Hand calculations
 - 3 pts Comparison of PSpice simulation versus measured

75 pts PROTOTYPE:

- 35 pts 1. Dual power rails
- 17 pts 2. Top rail within voltage ripple of 1%
- 17 pts 3. Bottom rail within voltage ripple of 1%
- 6 pts 4. Power supplied from wall outlet