Final Review

Two hour exam.
More heavily weighted towards the latter half of the class.

- Basic Concepts of Current, Voltage, Time
- Translation between schematics and netlists
- KCL analysis
- Linux
  - Survival commands: ls, pwd, ...
  - File system references: `.` `..`
  - File redirection: `>` `>!`
  - Wildcard usage: `*`
- Capacitors
  - What they do, terminal characteristics
  - Defining characteristic: $I_C = C\frac{dv}{dt}$, what does it mean?
  - How voltage increases across a cap when charged through a resistor
- Inductors
  - What they do, terminal characteristics
  - Defining characteristic: $V_L = L\frac{di}{dt}$, what does it mean?
  - How current increases through a inductor when it flows through a resistor
- Diodes
  - What they do, terminal characteristics
  - How they work as rectifiers and waveform generators (waveform shape emphasis)
- BJTs
  - What they do, terminal characteristics,
  - Terminal names, current flow directions
- Lab
  - DMM usage
  - Anything we did in lab