Midterm Wed. Oct. 3rd,
Last name A-K in 2040 Valley LSB, L-Z in 10 Evans
Review Session #1: 1-2 PM Sat. Sept. 29 (TBA likely in Evans)
Review Session #2: 5-6:30 Tue. Oct 2, 2060 Valley LSB

Topical Coverage First Midterm
Schwarz and Oldham Material followed by skills

Chapter 0: all
Terminology: devices, circuits, systems
Advantages of digital systems

Chapter 1: all
Electrical quantities: charge, current, voltage power, energy
Electrical circuit diagrams
Kirchhoff current and voltage laws to analyze basis circuits.

Chapter 2: all except 2.4 Loop Analysis, 2.6 and 2.7, light on 2.5
Independent Ideal Sources and simple circuit analysis
Ideal resistors and resistors in series and parallel
Node analysis of circuits with up to 8 branches
Voltage and current dividers

Chapter 3: all
Equivalent circuits: simplest is Thevenin and Norton
Shortcut for finding R_{EQ} by turning sources to zero
Nonlinear loads and load lines
Power calculations

Chapter 5: all light on 5.3 and very limited inductor circuits.
Ideal capacitors and inductors and their 8 properties
Big ones: V continuous on capacitor, I continuous on inductor; energy

Chapter 8.1: Only 8.1
EE 40/42 simple solution method
use intuition about starting and ending values and time constant
Application to switching and pulses
KCL to get differential equation for capacitor voltage and inductor current

Likely Exam Emphasis
Basic circuit analysis with simple sources and resistors
Standard circuit analysis and equivalent circuits
Nonlinear load with a load line technique
Transient analysis
Nodal analysis of a sizeable circuit