Examination 2 Coverage

• Chapters 4-9 -- *Nelson, Nagle, Carroll, and Irwin*

• Topics
  – Modular combinational logic
    • Decoders
    • Multiplexers
    • Seven-segment displays
  – Programmable logic
  – Synchronous sequential circuits
    • State diagrams and state tables
    • Timing diagrams
    • Flip-flops (D and JK)
    • Registers
    • Counters
    • Finite state machines
    • Mealy machines
    • Moore machines
    • Analysis
    • Design
    • Equivalent states, state table reduction
    • State assignment
  – Applications of synchronous circuits
    • Sequence recognizers
    • Code converters
    • Controllers