A Few Words on Wednesday’s Exam

Logistics
• In-class, 50 points in 50 minutes
• Open-book, open-note exam
  • No calculators, cell phones, laptops, etc.

Format
• Similar to homework assignments
• NOT at all like quizzes

Material
• Chapters 1 - 6
• Anything covered in lecture

Example Topics (non-exhaustive)

Bits and data
• Data types and conversions
• Binary arithmetic and logical operations

Digital logic
• Transistors and logic gates
• Truth tables and PLAs
• Larger logic blocks: adders, muxes, registers, memories
• State machines

Instructions
• Von Neumann model
• Parts of a computer
• LC-3 instructions (encoding & operation)

Synthesis
• Relationship between digital logic and instruction execution

Exam Focus

Bottom-up, conceptual understanding
• Using/understanding larger logic blocks
• Bridging the levels of abstraction

Design simple things
• Design a circuit that does...
• Write a LC-3 snippet that does...
  • Example: build subtract from NOT, ADD+1, ADD

Analyze complicated things
• What does this circuit do?
• What does this LC-3 snippet do?
• Complete the circuit such that...

Suggestions for Exam Preparation

Understand homework assignments
• Use solutions we handed out

Review readings and lecture notes
• Remember: open-book and open-note exam, but only 50 min.

Review old midterms

Work end-of-chapter problems
• Especially Chapter 3 and Chapter 5
• Answers to odd-numbered exercises at book’s website

Attend evening review session
Past Distribution on Midterm

Midterm Score Distribution

- Median: 35
- Mean: 34

CSE 240