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