CMSC201
Computer Science I for Majors

Lecture 25 – Final Exam Review

Prof. Katherine Gibson

Prof. Jeremy Dixon

Office Hours

- Tuesday is the last day office hours will be held

Exam Rules

- The final is closed everything:
  - No books
  - No notes
  - No cheat sheets
  - No laptops
  - No calculators
  - No phones

Exam Rules

- Place your bookbag under your desk/chair
  - NOT on the seat next to you

- You may have on your desk:
  - Pens, pencils, erasers
  - Water bottle
  - **UMBC ID**
    - You **must** bring your UMBC ID with you to the exam! We won't accept your test without it.

4

Exam Rules

- **DO NOT CHEAT!!!**

- Cheating will be dealt with severely and immediately
  - If a TA or instructor sees you looking at another student's paper (or anything other than your own exam) they will take your test from you

- Your TA or instructor may ask you to move at any time during the test

Exam Time

- Final Exam will held be on Friday, **May 13th from 6 PM to 8 PM**

- If you need SDS accommodations, you must request them and notify us ASAP

Exam Locations

- Being held in three separate rooms
    - ENGR 027 – Sections 2, 5, 11, 12, 15, 22, and 23
        – Alex, Grace, Joe, Rishi, Ted, Tyler
    - ITE 102 – Sections 4, 14, and 21
        – Chris, Jeremy, Michael
    - ITE 104 – Sections 3, 9, 10, 16, 18, and 20
        – Hailee, Jacob, Katie, Liz, Patrick

- Make sure you go to the correct room!

Exam Seating

- Space allowing, you will sit every other seat, so that you are not next to another student

- Your instructor may have specific instructions for their lecture hall seating arrangements

- Make sure you know how to get to your exam room location – arrive early if possible!

Questions about Exam Rules?

Exam Format

- Similar to the midterm
  - Going over the slides and making sure you are comfortable with the material would be a good idea
  - Try some of the exercises and practice examples available in the slides

Exam Format

- Multiple Choice
- True/False
- Code evaluation
  - Given code, what does it do?
- Debugging
  - Find and fix errors
- Fill in the blank
  - Complete a piece of partially-written code

Questions about Exam Format?

Exam Content

- Everything we covered at the beginning!
- From the midterm, you should be familiar with:
  - Evaluating expressions
  - Control structures
    - For Loops
    - While Loops (including Interactive loops)
    - If/Elif/Else
  - Decimal <-> Binary conversion

Exam Content

- From the midterm, you should be familiar with:
  - Lists
    - Indexing (including negative indexing)
    - Appending
  - Debugging
  - Strings
    - String functions like split()

Exam Content

- Everything else we've covered so far!
- You should be especially familiar with:
  - More control structures
    - Recursion
    - Functions
      - Passing and returning variables
  - File I/O

Exam Content

- You should be especially familiar with:
  - Data structures
    - Tuples
    - Dictionaries
  - Classes
    - Creating a class
    - Data vs class attributes
    - Constructors
    - Built-in methods

Exam Content

- You should be especially familiar with:
  - Algorithms and Analysis
    - Searching algorithms
      - Linear
      - Binary
    - Sorting algorithms
      - Selection
      - Bubble
      - Quick

You should understand how they work, and know how fast they run.

Exam Content

- You should be especially familiar with:
  - Recursion
    - Recursion
      - Recursion
  - Program design
    - Top down design
    - Creating "good" code

Questions about Exam Content?

Exam Advice

- Write down your name and circle your section

- Flip through the exam and get a feel for the length of it and the types of questions

Exam Advice

- Some questions have partial credit
  - You should at least <u>attempt</u> every problem
  - If you don't know how to do one part of the problem, skip it and do the rest
  - Make sure to pace yourself – this exam is longer than the midterm!

Exam Advice

- If a problem is unclear or you think there is an error on the exam, raise your hand

Any Other Questions?