# CMSC201 Computer Science I for Majors

Final Exam Information

# **UMBC**

- Friday, December 14<sup>th</sup> from 6:00 to 8:00 PM
- Common Final Exam in 4 lecture halls
  - MEYR 030
  - ITE 104
  - SHER 003
  - ENGR 027



- If you are in discussion section....
  - -2, 3, 4, 5, 6, 7, 20, or 21
    - Your exam will be in ENGR 027
  - -9, 10, 11, 12, 13, 14, or 27
    - Your exam will be in ITE 104
  - 16, 17, 18, 19, 30, 31, 32, 33, 34, or 35
    - Your exam will be in MEYR 030
  - 23, 24, 25, 26, or 28
    - Your exam will be in <u>SHER 003</u>



- If you are in discussion section....
  - -2, 3, 4, 5, 6, 7, 20, or 21
    - Your exam will be in ENGR 027
  - -9, 10, 11, 12, 13, 14, or 27
    - Your exam will be in ITE 104
  - 16, 17, 18, 19, 30, 31, 32, 33, 34, or 35
    - Your exam will be in MEYR 030
  - 23, 24, 25, 26, or 28
    - Your exam will be in <u>SHER 003</u>



# **Exam Rules**

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



# **Exam Rules**

- Place your bag under your desk/chair
  - NOT on the seat next to you
- You may have on your desk:
  - Pencils, erasers
    - You <u>must</u> use a pencil, not a pen
  - Water bottle
  - UMBC ID
    - You <u>must</u> bring your UMBC ID with you to the exam!
       We won't accept your test without it.

# **Exam Rules**

- Your TA or instructor may ask you to move at any time during the test
  - This doesn't mean we think you're cheating
- That being said, DO NOT CHEAT!!!
- Cheating will be dealt with severely and immediately
  - There will be no retakes or partial credits

# **Exam Seating**

- Space allowing, you will sit every other seat, so that you are not next to another student
- The instructor in the room may have specific instructions for their lecture hall seating arrangements
- Your exam <u>might not be</u> in your regular classroom – so arrive early!

# **Exam Format**

#### **Exam Format**

- Questions are similar to the midterms
- The final is longer than any exam you've had
  - 120 minutes instead of 75 minutes
  - 200 points instead of 75 or 125 points
- No new types of questions

- The final is cumulative! The following is a nonexhaustive list of course topics:
  - Variables
  - Evaluating expressions
  - Control structures
    - While loops and For loops
    - Functions (and Recursion!)
    - If/Elif/Else

- Debugging
  - Syntax and Logic Errors
- Input and Output
  - Terminal based
  - File based
- Binary, Decimal, Hex, and ASCII
- Lists [indexing, appending, removing, etc.]
- Strings [indexing, slicing, splitting, joining, etc.]
- Dictionaries [creating, manipulating, etc.]

- You should be especially familiar with:
  - Searching
    - Linear
    - Binary
  - Sorting
    - Bubble
    - Selection
    - Quick
  - Run Time & Big Oh / Big Omega / Big Theta

You don't have to know how to code any search or sort, but you do have to know how each general algorithm works, and their corresponding Big Oh and Big Omega

When you first get the exam...

- Write down your name
  - Make sure your name is <u>legible</u> and on the line
- Circle your discussion section
- Read the Academic Integrity agreement
  - Sign your name underneath

When the exam starts...

- Flip through the exam and get a feel for the length of it and the types of questions
  - The programming problems are the last questions on the exam – don't leave them until the last minute!

- Most questions have partial credit
  - You should at least <u>attempt</u> every problem
  - If you don't know how to do one part of a problem, skip it and do the rest
  - -You can use comments instead of code (like "# get user input") if you know what you want a piece of code to do but not how to do it

- After you are done coding the programming problems, try "running" your program with some input and making sure it works the way you think it does
  - Trace (on paper or in your head) what the code is doing and what paths it is taking (loops, decisions)
- If a problem is unclear or you think there is an error on the exam, raise your hand

# Advice and Other Info

# **Review Worksheets**

- There are two review worksheets available on the website.
- We <u>will not</u> be releasing answers to either review sheet.
  - Work with other students!
  - Review the lecture slides!
- You'll understand and retain the information better if you solve the problems yourself first, then check your answers with peers.
- Outside review sessions will be announced on Blackboard.

# Advice on How to Study

- Just looking over the slides won't be enough!
  - Try some of the live-coding exercises and practice examples available in the slides
  - Redo old labs or homeworks (without looking at them first!)
- Form study groups with other students
  - Create and trade possible exam questions
- Do the entire review sheet (especially the hard parts!)
  - Check your answers are correct by using Python, checking the notes, or talking to other students

# **Announcements**

- Project 3 is due Tuesday, December 12<sup>th</sup> at 8:59:59PM
- Complete the course evaluation sent to your email
- Few more assignments out now, due at end of week
  - Survey 2 and 3
- Final exam is when?
  - Friday
  - December 14<sup>th</sup>
  - 6:00 to 8:00 PM
  - Where?



- If you are in discussion section....
  - -2, 3, 4, 5, 6, 7, 20, or 21
    - Your exam will be in ENGR 027
  - 9, 10, 11, 12, 13, 14, or 27
    - Your exam will be in ITE 104
  - 16, 17, 18, 19, 30, 31, 32, 33, 34, or 35
    - Your exam will be in MEYR 030
  - 23, 24, 25, 26, or 28
    - Your exam will be in <u>SHER 003</u>