# CMSC201 Computer Science I for Majors

Lecture 25 – Final Exam Review

Prof. Jeremy Dixon

## **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

#### **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

#### **Exam Time**

Final Exam will held be on Friday,
 December 11<sup>th</sup> from 3:30 to 5:30 PM

- If you need SSS accommodations, you must request them and notify us ASAP
  - Try to schedule for Friday, December 11th
- If you will be unable to take the exam at that time, you must notify your instructor ASAP

#### **Exam Locations**

- Being held in three separate rooms
  - Section 1 (Gibson, MW @ 1) CHEM 030
  - Section 7 (Dixon, TR @ 5:30) CHEM 030
  - Section 13 (Dixon, TR @ 10) CHEM 030
  - Section 19 (Morawski, MW @ 4) PAHB 132
  - Section 25 (Gibson, TR @ 4) PHYS 101
- 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?





"Well, here we go again. ... Did anyone here not eat his or her homework on the way to school?"

#### **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?





- 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

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

- 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

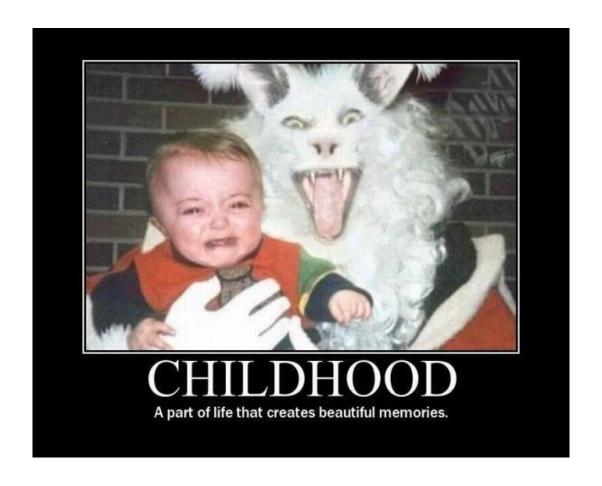
- You should be especially familiar with:
  - Data structures
    - Tuples
    - Dictionaries
  - Classes
    - Creating a class
    - Data vs class attributes
    - Constructors
    - Built-in methods

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

- 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

- 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 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?

#### **Announcements**

- Project 2 is out
  - Due by Tuesday, December 8th at 8:59:59 PM
  - Do NOT procrastinate!

- Final is on Friday Dec 11<sup>th</sup>, 3:30 5:30 PM
  - You <u>must</u> bring your UMBC ID with you to the exam!
     We won't accept your test without it.
  - You can do it! We believe in you!

## **Review Time!**

What would you like to cover?