

CMSC201

Computer Science I for Majors

Lecture 27 – Final Exam Review

Office Hours

- Tuesday (May 16th) is the last day that office hours will be held
- Study Day is Wednesday (May 17th)

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 **must** use a pencil, not a pen
 - Water bottle
 - **UMBC ID**
 - You **must** 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
 - If a TA or instructor sees you looking at another student's paper they may take your test from you

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!

Exam Time and Locations

- Final Exam will held be on Friday,
May 19th from 6:00 to 8:00 PM
- Being held in two separate rooms
 - ENGR 027 – Sections 2, 3, 4, 5, 15, 16, 18
– Dr. Gibson's sections
 - MEYR 030 – Sections 9, 10, 11, 12, 20, 21, 22, 23
– Dr. Wilson's sections
- **Make sure you go to the correct room!**

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
- Very similar to the in-class worksheet
 - Questions are less “tricky” than the worksheet, but the types of questions are generally the same

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

Exam Format

- Programming problems
 - Given a problem, write the code to solve it
- Tips:
 - Don't jump straight into coding
 - Read the question carefully
 - Plan out what your code needs to do

Questions about Exam Format?



Exam Content

- Everything we covered at the beginning!
- From the midterm, you should be familiar with:
 - Evaluating expressions
 - Control structures
 - While Loops (including Interactive loops)
 - If/Elif/Else
 - Lists
 - Indexing and appending

Exam Content

- From the midterm, you should be familiar with:
 - Debugging
 - Strings
 - String functions like `split()` and `strip()`
 - Functions
 - Passing and returning variables

Exam Content

- Everything else we've covered so far!
- You should be especially familiar with:
 - For loops (and range)
 - File I/O
 - Data structures (tuples and dictionaries)
 - Decimal \leftrightarrow Binary conversion
 - Recursion
 - Classes (conceptual only)

Exam Content

- You should be especially familiar with:
 - Algorithms and analysis
 - Searching algorithms
 - Linear & Binary
 - Sorting algorithms
 - Selection Sort, Bubble Sort, & Quicksort
 - Multi-dimensional lists
 - 2D and 3D lists
 - Printing, creating, manipulating

You should understand how they work, and know their run times

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

Exam Advice

- Some questions have partial credit
 - You should at least attempt 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!

Any Other Questions?



Review Worksheet Answers

- Answers will not be provided
- Work with other students on the review sheet!
- You'll understand and retain the information better if you solve the problems yourself

Announcements

- Survey #4 will come out Saturday morning
 - Will be due Wed, May 24th @ 11:59 PM
 - Similar to Survey #1, which asked about your performance on and prep for the midterm exam
- TAs have volunteered to do out-of-class reviews
 - Tuesday from 7 to 9 PM (ITE 233)
 - Wednesday from 7 to 9 PM (ITE 233)