COP 3223C

Midterm Exam Overview

Date, Time and grade

- Date of Exam: Tuesday, October 19, 2021
- The exam will start at the same time when your class starts
- The exam will end 2 minutes before the end time of your class
- Total time 1 hour and 13 minutes
- Total grade for the midterm written exam: 100
  - **It covers 15% of your course grade!**

Exam Environment

- The exam will take place in the classroom
- Fully written exam
- Question paper will be provided
- There will be space to answer the questions in the question paper
- All answers should be written in the question paper within the space provided.
- You can use side of the question paper for any temporary calculation, or scratching ideas, etc.
- You are allowed to use four function calculator (no other calculator will be allowed)
- It is a closed book, closed internet, closed neighbor exam.
- **You must have to bring your UCF ID card with your picture in it.**

Topics for the midterm exam

- All the topics related to the lecture slides 1 to lecture slide 9 (Array).
  - Only two examples from the Array is not included in the midterm exam
    - Excluded examples are: The character counting example and the searching and storing all indices example

- Lecture 1 Intro
- Lecture 2- variable- data type-input-constant
- Lecure-3-Arithmetic expression and Mod operator
- Lecture 4 – Decision control if-else-part 1
- Lecture 4 – Decision control if-else-part 2
- Lecture 5- Calling Prewritten Function in C
- Lecture 6 – Writing our own function
- Lecture 7 – Loop
- Lecture 8 – Switch Case
- Lecture 9 – Arrays 1D (Everything and lab related code (Except two examples: the character counting example and the searching and storing all indices example).
  - You need to know passing individual element to array and passing the entire array. Also, note that passing an array to a function can change the array unlike regular variable.

Question Pattern (read it and practice accordingly!)

- **You got some ideas about pattern of questions from the quizzes, but as the exam has more times, there will be more questions with various levels of difficulties.**
- **There will be enough time to answer them all if you do not mess-up much.**
- **Question can be:**
- **Multiple choice questions/True False/fill in the blanks**
- **Error and Bug tracing question**
- **Output tracing question**
- **Code conversion: for example: converting while to for loop, if-else to switch or switch-case to if-else, nested if-else to && || operator, etc.**
- **Conceptual questions, such as magic number, function prototype, problems with VLA, etc.**
- **Programming questions**
  - **Writing a full program**
  - **Writing function for a given problem**

How to prepare

- Remember, this is **NOT** a course where I will say to memorize the factorial function, memorize the prime number code, memorize sum of digit code, etc.
  - But we saw, various c syntax and how to solve varius problems with them
  - how to think about a problem and design the solution
- So, this course is more about understanding the C syntax and use them for solving various problems.
- So, in the exam, you will demonstrate your understanding by answering the questions.
- As I said there will be easy to difficult level questions
- If you have done all the assignments on your own and done the exercises yourself, have re-written the code you have in the notes on your own with a very clear understanding to them
  - And you have updated your understanding later on when you get the solution of the exercises,
  - And before the exam if you have confidence to solve those problem without looking at the solutions
  - then you should be ready to take the exam with a pretty good score.

How to prepare

- You have already seen the quiz questions, have seen the slide about the question pattern. So, revise the course materials keeping the question pattern in mind.
- Go through the slides and examples, class notes that you have taken, and very importantly exercises (not memorizing. Understand them).
- Uploaded codes and solutions are also very important!
- Go through the lab problems, too.
- Practice [If you have not done so yet, try to do the exercises on your own, try to do the examples in the slides on your own without looking at the solution]
- Again, if there is something in the slide, try to do it yourself and then see the solution.
- Practice the assignments and write them again if they were not perfect.

And at the end I must have to say:
I love you all and I wish you all the best.
Good luck for the exam!