CIS 26B – Advanced C Programming

# Final Exam – Review

The final exam is open book and open notes. Think of an open book exam the same way you would as a closed book exam – preparation is extremely important. The open book and notes will not be helpful unless you really understand the material. You will not have enough time to look for every answer in your text or/and notes.

Best way to prepare for the final exam: *Eat right, get enough sleep, and exercise!*
*Make sure you arrive at the exam early!*
Also, review class notes and the corresponding chapters in the textbook. Then practice class and book exercises and problems, and class examples without consulting the notes.

The final exam will be similar to the midterm exams, emphasizing the material learned after the second midterm but covering the rest of the quarter as well.

0. (6 points) 1 question – Chapter1
   Optimal C Coding Style: 1 to 3 short exercises exercise such as "Rewrite the following code/function using optimal C coding style"

1. (16 points) 4 to 8 short exercises – Chapters 2, 3&4
   Review of Standard Pointer and Array Operations. Exercises: 1, 5
   Stacks, Queues, & Linked Lists. Exercises: 2, 4, 8
   Advanced String Manipulation. Exercises: 1, 2, 3, 7

2. (16 points) 4 to 8 short exercises – Chapters 5&6
   Advanced Input and Output. Exercises: 1, 2, 5
   Bit Manipulation. Exercise: 1

3. (16 points) 4 to 8 short exercises – Chapters 7&8
   Recursion and Binary Trees. Exercises: 3, 4
   Multidimensional Arrays. Exercises: 2, 5, 9

4. (16 points) 4 to 8 short exercises – Chapters 9&10
   Time, Pointers to Functions, Variable-Length Argument Lists. Exercises: 2, 5
   qsort & bsearch, Signals, Interrupts, and Error-Handling, File-Related Functions. Exercise: 2

5. (30 Points) Problem 10, page 241 (structs and pointers to functions) OR
   Problem 7, page 240 (binary files and time functions) OR
   Problem 3, page 270 (array of strings and files) OR
   Problem 10, page 202 (recursion and binary files) OR
   Problem 7, page 201 (binary search tree processing)