CSCI 1321 - Introduction

1-16-2002

Opening Discussion

- What did you talk about last semester? Obviously you aren't going to answer this completely, but I am interested in hearing a rundown.
- Are there any topics in particular you want to learn this semester? What do you want to be able to do at the end of this semester?
- Information sheets

Personal Introduction

- I am Dr. Mark Lewis. I'm the newest faculty member in the department.
- I did my undergrad here at Trinity and graduated in 1996.
- My research interests include:
  - Large scale numerical simulations (mostly astronomical).
  - Theory of Programming Languages (program analysis and optimization)
- I also play a fair bit of basketball.

Course and Web Page

- You are in the right place at the right time. Be sure to show up here every MWF.
- Details for this course are on the web page at (blackboard has a link here)
  http://www.cs.trinity.edu/~mlewis/CSCI1321-S02
- My office hours are posted on the syllabus but you should be aware that I'm generally very accessible.

The Text and Other Books

- The course text is "Data Structures and Problem Solving Using C++" by Mark Allen Weiss.
- You should also seriously consider buying one or more other C++ reference books. I've listed a few possibilities on the web page but it might be best just to go to the local book store and browse to see what seems to fit your style.

Course Description

- This is basically a second semester computer science course taught using the C++ programming language.
- We will look at how to develop solutions related to a single large problem during the course of the semester.
- The tools we will look at for doing this include data structures like linked lists as well as programming constructs like inheritance.

Grades

- Your grade in this class is determined by a combination of 4 parts.

Assignments (6)	50%
Tests (2)	30%
Quizzes (6 drop 1)	10%
Class Participation	10%

Assignments

- Half of your grade comes from the completion of 6 assignments. These assignments will test your ability to implement the ideas that we discuss in class.
- A week before each assignment is due you will turn in a design for it.
- The work you turn in for assignments must be your own. You can use code segments I send you, but you should acknowledge the source.
- Submitted code should be properly indented and commented.

Tests

- The second largest portion of your grade comes from two tests, one midterm and the final. Each contributes 15% to your grade.
- These tests will be designed to test your understanding of concepts. They are not intended to test your knowledge of syntax, though you will have to understand the syntax reasonably well to communicate your understanding of the ideas.

Quizzes

- During the semester you will also take 6 quizzes over the course of the semester. These quizzes serve a few purposes.
  - They give you feedback about how well you are understand and lets me know what you aren't understanding.
  - The quizzes use the same question format as the tests so you don't walk into the tests blind.
  - Questions can come from recent readings.

Class Participation

- 10% of your grade will come from your participation in class. This includes both showing up and participating in discussions. You can also get class participation points by showing that you have been thinking about the material outside of class. Sending me interesting links will help here.

Extra Credit

- Most quizzes and the tests will have extra credit problems on them. Those problems can be arbitrarily hard though.
- The assignments will typically include extensions for those who want to explore the material further.
- You can also get EC on the final exam by participating in competitions at TopCoder.com.
  - 1 point per tournament up to 5 points.
  - 10 points for the student with the highest ranking.
  - List TrinityCS as your referral.

Schedule

- I have a list of topics of what we will discuss on the web page. This list is subject to change, but I intend to keep all due dates as they are currently listed.
- We jump around in the book a bit, but I am pulling most of the material from the text and you can see where we will go over time.

Minute Essay

- At the end of every class I will ask you to write something short for me. Often this will be a question related to the days topic. For today it is a pretest.
  - Write a loop to print out the numbers 1 through 10.
  - Write the class declaration for a complex number class (z=x+iy).
  - What are the two main methods of a stack?
  - Write a dynamic linked list class (with add method).