

## Elementary Data Structures CS 1150

**Instructors**           Libero Ficocelli  
                              David Gregg

**Prerequisite**         CS 1140 (or comparable course such as CS 1000)

### Course Content

This course is designed to be a continuation of CS 1140 and as such assumes that the student is already familiar with basic programming concepts such as: assignment to variables, conditional statements, iteration, arrays, procedures/functions, text files and has written and debugged programs whose size may have ranged up to several hundred lines of code.

The **primary objectives** of this course include the following

1.    Get students to the point where they can construct reasonably complex algorithms and write well structured, properly documented programs. This requires learning to debug code efficiently.
2.    Serious study of the details of the Pascal language, this would include many advanced programming topics such as: records, sets, recursion, binary files and pointers.
3.    Introduce several commonly used elementary data structures and various techniques for representing them, this will include stacks, queues, trees and graphs.

**Textbook**                Pascal Plus Data Structures  
                              Dale and Lilly 4th Edition.  
                              Heath Publishing

**Applied Component**    Lab Quizzes,  
                              Lab Assignments,  
                              Home Assignments         :     30 %

**Theory Component**     Class Quizzes             :     10 %  
                              Midterm                   :     25 %  
                              Final                      :     35 %

### Special Notes

1. You will be eligible for a passing grade, **only** if you obtain 35 marks out of a possible 70 marks from the Midterm, Final and Class Quizzes
2. The penalty for late assignments is a 30% deduction for any assignment up to one week late. Any assignments received after this period will not be assigned a grade.