

*Welcome to
Computer Science 2604
Data Structures
and File Management*



Composition #8, Kandinsky

Instructor: William D McQuain
Email: mcquain@cs.vt.edu
Office: 631 McBryde Hall
Office Hours: 1:30–3:00 MWF and by appointment

Prerequisites

CS 2704 CS Majors and Minors must have completed this prerequisite with a grade of C or higher (C- is not acceptable). CpE Majors must have completed this prerequisite with a grade of C- or higher.

Math 2534

Note: students are expected to have prior proficiency in the C++ programming language, including the design and implementation of object-oriented systems.

There will be absolutely NO exceptions to these requirements.

Required:

Data Structures and Program Design in C++, by Kruse & Ryba,
Prentice-Hall, ©1999



Recommended:

The C++ Programming Language, 3rd Ed., by Bjarne Stroustrup,
Addison Wesley, ©1997

CS 2604 Course Notes, Fall 2000 Edition, W D McQuain, ©2000 (as
available)

<http://courses.cs.vt.edu/~cs2604/>



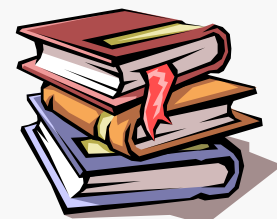
Programming and Problem Solving in C++, N. Dale, C. Weems & M. Headington, Jones and Bartlett Pub., ©1999

Data Abstraction and Problem Solving in C++: Walls and Mirrors, 2nd Ed., by Carrano, Helman and Veroff, Addison Wesley, ©1998

A Practical Introduction to Software Design with C++, by S Reiss, Wiley, ©1999

CS 1704 Course Notes, Spring 2000 Edition, N D Barnette & W D McQuain, © January 2000 <http://courses.cs.vt.edu/~cs1704/>

CS 2704 Course Notes, Spring 2000 Edition, W D McQuain, © July 2000 <http://courses.cs.vt.edu/~cs2704/>



Evaluation and Grading:

Point Distribution

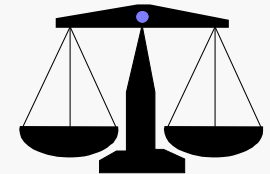
Final grades will be based on the average achieved over the following :



Item	Weight	Tentative Dates
Programming Projects		
Minor Projects	20%	various, TBA
Major Projects	25%	various, TBA
Homework and Quizzes	12%	various, TBA
Quizzes	3%	pop
Midterm Test	15%	TBA
Final Exam	25%	Friday, December 8, 4:25-6:25

Grade Scale:

The usual 10-point scale will apply (subject to any curve). A final average of 90% will guarantee an A-, 80% will guarantee a B-, and so forth.



Curve

A grade curve may or may not be employed in this course. The application of a curve is dependent upon class performance on tests, projects and homework. The decision to utilize a curve rests entirely with the course instructor.

General Issues

- CS 2604 classmates
- CS 2604 Listserv for announcements and discussions
- CS 2604 GTAs
- CS 2604 Instructor



C++ Language Help

- CS 2604 Listserv
- texts from earlier courses (Stroustrup, Dale, etc.)
- online help (Visual C++ MSDN Library)



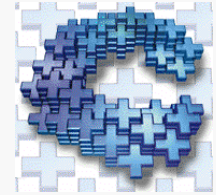
Lecture Instruction

Lectures will consist of presentations, applications, problems solutions interspersed with classroom discussion.



Test Environments

- All programming assignments submitted are required to compile under either Microsoft Visual C++, version 6.0 or the GNU g++ compiler installed on the FreeBSD machines in McB 124.
- Programs will be tested under either Windows NT or FreeBSD.
- It is the student's responsibility to ensure that his/her programs execute correctly in the appropriate environment; programs that do not will receive substantial deductions.



Program Demonstrations

- For the major projects, students will demonstrate their implementation to a GTA in the McBryde CS Dept. Computer Lab.
- Students may not bring their systems to the labs to demonstrate their programs.
- Any code changes (made at the demo) will incur a penalty equal to the late penalty at the time of the demo.



Backups

Students are responsible for making backup copies of all their work in this course. Loss of work due to hard drive failure is **NOT** an acceptable excuse. Backup copies of files on the same hard drive are not backup copies. Backup copies of files on second hard drives are also risky. Backup copies should be maintained on two separate distinct storage mediums, (e.g., hard drives and Zip disks).



Backup copies should be maintained until after the end of the term and students have received their course grade. (The Army lives by triplicate for a reason.)

Remember: Computer systems are mechanical devices.

Systems fail. Drives die. Bad sectors appear.

Plan for it. It is inevitable!

