Welcome to 
Computer Science 2704
### Instructor:

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>William D McQuain</th>
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<tbody>
<tr>
<td>Email:</td>
<td><a href="mailto:mcquain@cs.vt.edu">mcquain@cs.vt.edu</a></td>
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<tr>
<td>Office:</td>
<td>631 McBryde Hall</td>
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<tr>
<td>Office Hours:</td>
<td>10:00 - 12:00 MWF</td>
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<td></td>
<td>and by appointment</td>
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Course Description

Credits: 3
Prerequisites: CS 2574 or ECpE 2574 (NO exceptions)

It is required that CS majors and minors entering this course have successfully completed (grade ≥ C) in all prerequisites and have gained proficiency in the use of the C++ programming language.

– Purpose:

The purpose of this course is to provide a means for students to learn how to design and develop medium-large programming systems involving multiple modules using basic Data Structures and Software Engineering Techniques.

Texts:

– Required:


– References:

C / C++ How to Program, H.M. Deitel & P.J. Deitel, Prentice Hall, ©1994
Evaluation and Grading:

- Point Distribution

Final grades will be based on the number of points achieved over the following:

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
<th>Tentative Dates</th>
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<tbody>
<tr>
<td>Project Testing and SE</td>
<td>45%</td>
<td>TBA</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
<td>TBA</td>
</tr>
<tr>
<td>Test 1</td>
<td>8%</td>
<td>Thursday, September 23</td>
</tr>
<tr>
<td>Test 2</td>
<td>12%</td>
<td>Thursday, November 11</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
<td>Tuesday, December 14, 1:05 to 3:05 (location TBA)</td>
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- 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 and homework. The decision to utilize a curve rests entirely with the course instructor.
Sources for Help/Questions etc.

- CS 2704 Classmates:
  CS 2704 Listserv & USENET news group
- CS 2704 GTAs & UTAs
- CS 2704 Instructor

Microsoft C++ Help

**CS 2704 USENET Newsgroup**

- Connect to: `vatech.class.cs2704`
- CS 2704 GTAs & others will respond to questions.
- Other Newsgroups: csugrad.pc-clone, csugrad.programming.c, comp.lang.c, comp.lang.visual
- A panel of "experts" will respond to questions.

**CS 2704 ListServ**

- Connect directions will posted online
- CS 2704 classmates, GTAs & others will respond to questions.

Lecture Instruction

Lecture

Lectures will consist of presentations, applications, problems and 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.
- Points will be deducted for programs not meeting this requirement.
- GTAs do not have time to go to dorms, etc. to grade programs on specific systems.

Program Demonstrations

- Demonstrations will take place in the McBryde CS Dept. Computer Lab for some assignments.
- Students may not bring their systems to the labs to execute their programs upon.
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 floppies).

- 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: Hard drives are mechanical devices. Hard drives fail. Plan for it. It is inevitable!
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