Welcome to Computer Science 3204  Operating Systems

Charlie Chaplin, Modern Times

Instructor and TA

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Prerequisites

CS 2604
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.

ECE 2504
CS and CpE Majors must have completed this prerequisite with a grade of C- or higher.

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.

Evaluation

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
<th>Tentative Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Projects</td>
<td>50%</td>
<td>See website</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
<td>See website</td>
</tr>
<tr>
<td>Quizzes</td>
<td>3%</td>
<td>Pop</td>
</tr>
<tr>
<td>Midterm Test</td>
<td>12%</td>
<td>Tuesday Oct 11</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
<td>7:45 – 9:45 Tuesday, Dec 13</td>
</tr>
</tbody>
</table>

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 instructors.
## Text and Recommended References

**Required:**

*Operating Systems: Internals and Design Principles, 5th Edition*

William Stallings  
Pearson, ©2005  

**Recommended:**

*CS 3204 Course Notes, Fall 2005 Edition*

Notes from Stallings, Et al.

Available at the course website:  
[courses.cs.vt.edu/~cs3204/fall2005/wmcquain/](courses.cs.vt.edu/~cs3204/fall2005/wmcquain/)

## Other Useful References

**C++: How to Program**, 5th Ed., by Deitel & Deitel, Prentice-Hall, ©2004

*CS 1704 Course Notes, Fall 2003 Edition*, N D Barnette & W D McQuain,  
©2003 at:  
[courses.cs.vt.edu/~cs1704](courses.cs.vt.edu/~cs1704)

*CS 2604 Course Notes, Fall 2005 Edition*, W D McQuain,  
©2005 at:  
[courses.cs.vt.edu/~cs2604](courses.cs.vt.edu/~cs2604)
Projects

S/E and Documentation Evaluation

All programming projects will be graded for adherence to good software engineering principles, including documentation, design, conformance to the stated specification, and programming style.

Each project specification will include explicit guidelines that you will be expected to follow.

For auto-graded projects, the TAs will grade your (first) submission to the Curator that received the highest score, and e-mail you the results. Note that if you make an incomplete submission (e.g., omitting required documentation) and that receives a perfect score, then the TAs will evaluate that incomplete submission.

There will be no exceptions to this policy.

Development System

Test Environments

- All programming assignments submitted are required to compile under g++ version 4.0.1 running on Fedora Core 4, as installed in the McBryde 124 lab.
- Programs will only be tested under that environment.
- 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.

Students developing on non-Linux systems, or using another C++ compiler are warned that there are many pitfalls and that they are YOUR responsibility.

Compliance with the ISO C++ Standard varies widely among older compilers, especially g++ prior to version 3.2 and Visual C++ prior to .NET 2002.

Your programs WILL be tested with the environment listed above. If it fails to compile, or exhibits incorrect behavior, we don’t care that it may compile elsewhere, or appear to run correctly elsewhere.
Late Work

Due dates
Each programming project and homework assignment will have a due date and time and will include instructions for submission.

Homework
Usually, no late submissions will be allowed for homework assignments.

Projects
Except in the very rare case that an extension is granted, late submissions will incur a penalty per diem late penalty that will be included in the project specification. This is typically 10%.

Extensions
Any request for an extension must be made, preferably by email, at least 24 hours prior to the due date. Late submissions will not be given any credit if submitted after graded assignments or solutions have been released.

Statute of Limitations
Any questions about the grading of an assignment must be raised with your instructor within two weeks after the graded assignment has been made available to you.

Sources of Help for This Course

General Issues
- CS 3204 classmates
- CS 3204 Forum online at forum.cs.vt.edu
- CS 3204 TAs
- CS 3204 Instructors

C++ Language Help
- CS 3204 Forum
- texts from earlier courses
- alt.comp.lang.learn.c-c++
- gnu.gcc.help, gnu.g++.help

Lecture Instruction
Lectures will consist of presentations, applications, problems and solutions interspersed with classroom discussion.
Course Administration 11

**Damage Control**

**Backups**

Students are responsible for making backup copies of all their work in this (and all) courses.

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.


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Course Administration 12

**Honor Code**

An exhaustive list of Honor Code violations would be impossible to present here, but among other things, each of the following is a flagrant violation of the Virginia Tech Honor Code, and violations will be dealt with severely (Honor Court):

- Working with another student to derive a common program or solution to a problem. There are no group projects in this course.
- Discussing the details required to solve a programming assignment. You may not share solutions.
- Copying source code (programs) in whole or in part from someone else.
- Copying files from another student's disk even though they might be unprotected.
- Editing (computer generated) output to achieve apparently correct results.
- Taking another person's printout from a lab printer, remote print printer, trash can, etc.

It is acceptable to discuss with classmates a programming assignment in a general way, i.e., to discuss the nature of the assignment. In other words, you may discuss with your classmates what your program is required to accomplish but **not how to** achieve that goal using C++. In no way should the individual statements of a program or the steps leading to the solution of the problem be discussed with or shown to anyone except those people cited in the following statement.
### Honor Code

Feel free to discuss the homework assignments and your program source code with the teaching assistants assigned to CS 3204, the instructor, or the free tutors provided by UPE. The discussion of your program source code **must** be limited to these people. Note that this specifically excludes discussions of your program source code with other students (even if they are not enrolled in CS 3204), or with tutors except for those named above. Privately hired tutors are not an exception to this requirement, nor are athletic or other tutors provided by the University.

Copies of all submitted work are retained indefinitely by the Department. Submitted programs are subjected to automated analysis for detection of cheating.

If you have any question as to how the Honor Code applies to this class, remember that:

- Any work done in this class must be done on an individual basis.
- Credit will be given only for work done entirely on an individual basis.
- Do not make any assumptions as to who can provide help on a programming assignment.
- All submitted work is archived. All submitted programs will be subjected to automated cheat analysis.

Evidence indicating the violation of the policies stated above will be submitted to the Honor Court.

It is much easier to explain a poor grade to parents or a potential employer than to explain an Honor Court conviction.