Course: Advanced Programming

Time & Place: Mondays, Wednesdays and Fridays 12:30pm-1:40pm, Social Science 2, Room 75.

Discussion/Lab Sections:

Time & Place: tbd.

Instructor: Dean Bailey; office: E2-249B; phone: 459-1339, e-mail: dbailey@soe.ucsc.edu

Teaching Assistant: tbd.

Office Hours:
- Bailey: Mondays and Wednesdays 3:15pm-4:30pm.
- TA: tbd


Other interesting textbooks, NOT required:
- The C++ Programming Language, by Bjarne Stroustrup.
- Practical C++ Programming, by Steve Qualline.

Syllabus:

Introduction
ANSI C++ Basics of Program Writing
Programming Style and Design
Basic Declarations and Expressions
Arrays, Pointers, Qualifiers
Basic I/O
Decision and Control Statements
Functions
Scope and Storage Class
Classes and Abstract Data Types
Constructors, Destructors, Conversions
Operator & Function Overloading and Polymorphism
Templates, Standard Template Library and Generic Programming
Inheritance and Object Oriented Programming
Exceptions
Object Oriented Programming and Modular Programming

Evaluation: The course work will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Final Examination</td>
<td>40%</td>
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<tr>
<td>One Midterm Examination</td>
<td>30%</td>
</tr>
<tr>
<td>Programming Assignments</td>
<td>30%</td>
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</tbody>
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Examination Schedule:

1. Final Examination, Tuesday, December 6, 2005, 12:00 noon-3:00 p.m.
2. Midterm Examination on Monday, October 31, 2005, 12:30 p.m.-1:40 p.m.
The examination schedule is fixed. In particular, requests for changes in the schedule will not be accommodated; if you have conflicts with this schedule, please do not enroll in the class. Also, no time extension will be given for late arrivals on examination days.

- **Academic Integrity:**
  - No form of academic dishonesty will be tolerated.
  - You are encouraged to discuss the course material and concepts with other students in the class. However, all work that you submit must be your own. Under no circumstances may you look at anyone else's code or show anyone else your code. And while you may discuss the concepts and techniques used in the programming assignments, you may not discuss implementation details of the assignments themselves.
  - Incidents of academic dishonesty will be reported according to UCSC’s policy on academic integrity, the full text of which can be found at [http://casas.ucsc.edu/avcue/integrity](http://casas.ucsc.edu/avcue/integrity)
  - Specifically for this class, if you are caught turning in work as your own, that is not solely your own, or assisting others in doing so, a formal written report will be sent to your Department, the School of Engineering, and to your Provost and academic preceptor. Furthermore you will get a failing grade for the course and the incident will be noted in your evaluation.