CSC200 Syllabus

Computer Problem Solving for Science and Engineering
Spring 2005

General Information

Times and Locations

Lectures: MWF 12:00-12:50. Chafee 273.
Labs: Section 01: T 12:00-1:45. Tyler - Envision Lab.
       Section 02: R 8:00-9:45. Tyler - Envision Lab.

Instructor

Marc Schraffengerer
Office: Tyler Hall. Room 136.
Email: schraffm@cs.uri.edu
Office Hours: MR 10:00-11:00

Course Web Site

http://homepage.cs.uri.edu/courses/spring2005/csc200s1/

Course Overview

Description

The course is designed to give Science and Engineering majors a good foundation of programming with direct application to their general field of study. After this course you should have the basic skills of developing scientific applications in C++.

Text

Cay Horstmann

Prerequisites

Credit or concurrent enrollment in MTH 131 or MTH 141. Not for major credit in computer science. May not be taken for credit by student with credit in CSC201 or CSC211.

Programming

You will be programming during the lab portion of this course as well as in some homework assignments and projects. During the lab section you will have opportunities to get help and ask questions about programming and the lab assignment. All programming in this course will be implemented in C++ using the Dev-C++ IDE (which uses the MinGW compiler). During the first and possibly second lab section we will be discussing the use of the IDE and compiler. All programming assignments that you hand in must come with all your C++ source code.

1This syllabus is subject to change, please only use as a point of reference.
Grading

Grade Breakdown

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<tr>
<th>Assignment Type</th>
<th>Percentage</th>
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<tr>
<td>Homework Assignments</td>
<td>10%</td>
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<tr>
<td>Lab Assignments</td>
<td>10%</td>
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<tr>
<td>Programming Projects</td>
<td>35%</td>
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<tr>
<td>Midterm</td>
<td>20%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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Examinations

There will be one midterm examination during regular class hours at a convenient time about halfway through the semester. At the end of the semester a final exam will be given at the time designated by the university’s final exam schedule.

Homework

I will hand out regular homework assignments from the text or small programming assignments throughout the semester. All homework assignments will be due the next class unless specified otherwise.

Laboratory Assignments

During the laboratory meeting times for this course I will provide small programming exercises and/or demonstrations. These exercises will be due at the end of the lab time period unless specified otherwise.

Programming Assignments

There will be about 3-4 programming projects during this course. These projects will be done individually (no group work). The projects will focus on the current course work and the classes interests. All projects must be done completely in C++, must not use any other libraries except the ones permitted by the instructor, and must be submitted as source code. Any projects that do not compile in Dev-C++ will be given a failing grade.

Late Submissions

All assignments should be handed in on the due date. If an assignment is handed in late, a penalty of 5% per day will be applied. Assignments over two weeks late will not be accepted.

Cheating

Cheating includes copying all or part of the code or report of another person, regardless of whether or not they are in the class. It is still copying and cheating if you perform some local and/or global substitutions and formatting. If you are found to be cheating all parties will receive a failing grade for the project and possibly an expulsion from the class with a failing grade (and will be brought to the attention of the Dean for disciplinary action.)

Attendance

Class attendance is not mandatory during the lecture class, although it is strongly suggested that you make all attempts to attend all classes. The lab portion of the course is mandatory and will factor into your laboratory assignment grade.
# Course Schedule

The course schedule shows the various topics that will be covered in this course if time permits. This schedule is flexible and subject to change based on the needs of the students. If there is more time left at the end of the semester we will cover some more advanced topics or go more detailed into topics already discussed.

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<tr>
<th>Topic</th>
<th>Chapter</th>
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<td>Introduction to Computers and Programming</td>
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<td>Data Types, Arithmetic, and Strings</td>
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<td>Flow Control</td>
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<td>Functions</td>
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<td>Streams</td>
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<td>Arrays and Vectors</td>
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<td>Objects and Classes</td>
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<td>Pointers</td>
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<tr>
<td>Graphics and Libraries</td>
<td>Handouts</td>
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