CSCI 121 – Spring 2005
Computer Science II

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Office Hours: MW 10:00 – 11:00  
R 10:00 – 12:00  
or by appointment

Office Phone: 610-625-7781  
Please do not call me at home

Course Description

A continuation of Computer Science I with emphasis on data and procedural abstraction. A study of basic organizations of instructions and data as realized in both hardware design and software development. Topics include encoding schemes for instructions and data, representative machine architectures, data representations in computer memory and in high-level languages.

Goals

• Understand the benefits and drawbacks of arrays and linked lists.
• Mathematically characterize the performance of algorithms.
• Understand and apply advanced features of C++, including pointers, templates, exceptions and objects.

Required Texts

• Absolute C++ by Walter Savitch
• Mathematics for New Technologies by Done Hutchison and Mark Yannotta

Responsibilities

Your timely attendance is expected at each class meeting. You are also responsible for the contents of reading assignments, handouts, lectures, class email, and the course web page.

If you have a disability that may affect your participation in this course, please contact me immediately to discuss academic accommodations.

Graded Material

• Homework problem sets will be assigned regularly for you to explore the concepts discussed in class. Typically, homework will be due the class session after it is assigned (excluding lab periods).
• Programming assignments will be assigned throughout the semester. These projects emphasize all aspects of program development, including design, implementation, testing, and documentation. It is especially important that you begin these projects as soon as they are assigned.

• Most Thursday afternoon class sessions will be laboratories. During these periods, you will use the computers to explore the concepts studied in class that week.

• Three tests will be given in class during the semester. The tentative dates for these tests are Thursday, February 3, Thursday, March 3, and Thursday, April 7.

• The final exam will be given in class during the final exam period.

Grade Determination

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
<td>A : 90 – 100%</td>
</tr>
<tr>
<td>Labs</td>
<td>20%</td>
<td>B : 80 – 89.9%</td>
</tr>
<tr>
<td>Projects</td>
<td>20%</td>
<td>C : 70 – 79.9%</td>
</tr>
<tr>
<td>Tests</td>
<td>30%</td>
<td>D : 60 – 69.9%</td>
</tr>
<tr>
<td>Final</td>
<td>15%</td>
<td>F : &lt; 60%</td>
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Late assignments will be penalized 10% per day.