Course Description

The purpose of this course is to build upon the foundation developed in CIS 3022 (pre-requisite). Students will learn more about the technical aspects of the field of computer science, including further object-oriented concepts, problem solving, user interfacing, and system testing. Due to the nature and complexity of computer science, this course will be time consuming and requires serious dedication on the part of each student. Attention to detail, analytical thinking, logical problem solving, and Java programming is very technical work and will be expected of you from day one in the semester. In addition, as in any course, rote memorization is necessary to recall the terms, definitions, and syntax taught. Please be aware of these points and arrange your schedule accordingly.

Recommended Textbooks

No text is required for this course. All material covered will be given in lecture. However a few recommendations for good supplements are given here. The cheapest and fastest way to purchase them is online.

- Program Development in Java, Liskov & Guttag, 2001, Addison-Wesley, ISBN: 0-321-43278-9 (includes a free copy of Depasquale's Java Backpack reference guide; for just the text, the ISBN is 0-201-65768-6)

A new version of the Nino & Hosch book was released this year, but I will continue to use the second edition.

Schedule (Tentative)

<table>
<thead>
<tr>
<th>Week #</th>
<th>Topics</th>
<th>Reading (Nino &amp; Hosch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Design Specs, Software Engineering</td>
<td>Ch 0, 1</td>
</tr>
<tr>
<td>1</td>
<td>Polymorphism</td>
<td>Ch 2 – 4</td>
</tr>
<tr>
<td>2</td>
<td>Interfaces</td>
<td>Ch 9, 11, 12</td>
</tr>
<tr>
<td>2</td>
<td>Graphical User Interfaces</td>
<td>Ch 17, 18</td>
</tr>
<tr>
<td>3</td>
<td>Graphical User Interfaces</td>
<td>Ch 17, 18</td>
</tr>
</tbody>
</table>
Grading

Your grade will be broken down into the following parts:

- Projects – 45%
- Midterm Exam – 15%
- Final Exam – 20%
- In-lecture Quizzes (best 5 out of 6) – 10%
- In-lab Activities (drop the lowest) – 10%
- Extra Credit - +5%

You will be given 5 individual projects over the course of the semester. Each part will be dependent on the previous parts. All project submissions will be electronic.

The two exams will be in-class and will be 75 minutes long.

The quizzes will probably be announced in advance, but may be given at unexpected times. They are mainly to make sure you show up and pay attention and will probably not require extensive preparation.

You will be graded on whether you show up and participate in your lab sessions. You will be allowed to miss one without any penalty.

Up to 5 points extra credit may be obtained by completing a subset of a collection of fun add-ons to the project. If you get all 5 points, you may choose not to take the final (your other grades will be reapportioned appropriately).

Cheating

It is expected that all work you submit for this class will be yours and yours alone. You are allowed to discuss the assignments with your classmates but under no circumstances
should you look at their code or submit anything that someone else has done. We will use special software to verify that your work is completely distinct from that of your classmates and also from documents on the internet.