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|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <b>Course:</b>        | CSCI 4050/6050 <i>Software Engineering</i>                                                                                                       |     |
| <b>Lecturer:</b>      | Krys J. Kochut                                                                                                                                   |     |
| <b>Office:</b>        | 546 GSRC                                                                                                                                         |     |
| <b>Office Hours:</b>  | T 1:30 - 3:30pm and W 9:00 - 10:00am and by appointment                                                                                          |     |
| <b>Text:</b>          | <i>Object-Oriented Software Engineering: Using UML, Patterns, and Java. 3rd Ed.</i> , by Bernd Bruegge and Allen H. Dutoit, Prentice Hall, 2010. |     |
| <b>Grading:</b>       | Homeworks & quizzes                                                                                                                              | 10% |
|                       | Midterm:                                                                                                                                         | 25% |
|                       | Final:                                                                                                                                           | 35% |
|                       | Term project:                                                                                                                                    | 30% |
| <b>Grading Scale:</b> | 90 - 100                                                                                                                                         | A   |
|                       | 88 - 89                                                                                                                                          | A-  |
|                       | 86 - 87                                                                                                                                          | B+  |
|                       | 80 - 85                                                                                                                                          | B   |
|                       | 78 - 79                                                                                                                                          | B-  |
|                       | 76 - 77                                                                                                                                          | C+  |
|                       | 70 - 75                                                                                                                                          | C   |
|                       | 68 - 69                                                                                                                                          | C-  |
|                       | 65 - 67                                                                                                                                          | D   |

**Notes:** In this course we will study the principles of Software Engineering. We will begin with introductory discussion of the software development process and what constitutes well engineered software. Then we will move on to software specification and requirements definition.

The next (major) part of the course will be devoted to software design. Although we will discuss several of the major design techniques, we will specifically concentrate on Object-Oriented Design (OOD). We will also discuss the principles of user interface design, concentrating on Graphical User Interfaces (GUIs).

A large portion of the course will be devoted to programming techniques, geared for reliable software development and software reuse. We will conclude the course with the discussions of software verification and validation techniques.

The programming projects will be done in either C++ or Java. Each project will include a permanent data store and a graphical user interface. The projects will be assigned and discussed at a later date.

Each student is expected to do his/her own work, but programming projects will involve team work, so communication is not only encouraged, but necessary. The grade of I (incomplete) is reserved for special cases only, such as a serious illness, and will be decided on individual basis.

All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

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| <b>Exam dates:</b> | Midterm | October 10, 2013, regular class time |
|                    | Final   | December 10, 2013, 8:00 - 11:00am    |