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Fall 2011

CEG 460/660-01: Introduction to Software Computer Engineering

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CEG460/660 Introduction to Software Engineering

Fall Quarter 2011

Wright State University

Course Description

This course is concerned with the techniques of designing and constructing large programs. Some of the required basic concepts necessarily have to be developed using small programs as examples. To this extent, we also study programming-in-the-small. The overall objectives are to present an overview of issues in the development of software, to discuss terminology, to illustrate via example case studies, and to give sufficiently detailed advice on how to develop quality software. Hands-on experience is emphasized through the use of homework and a class project.

Professor

Dr. Thomas C. Hartrum

Office: 337 Russ Engineering Center

Office Hours: M, T, W, R 2:00 – 3:00 or by appointment.

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Class Hours: T Th 6:05 PM – 7:20 PM, Russ, Room 144

Text

Stephen R. Schach, *Object-Oriented Software Engineering, 1st Edition*, McGraw Hill, 2008.

Prerequisites

CS400 or CS600

Grading

Grading will be as follows:

| | |
|------------|----|
| Homework | 15 |
| Project | 25 |
| Midterm | 30 |
| Final Exam | 30 |

Course grades will be based on the total score as follows. A: 90-100, B: 80-89, C:70-79, D: 60-69, F: below 60. Grades may be further curved if appropriate.

You may work with others on homework assignments, but you must turn in your own individual work. Homework that has obviously been copied will result in a grade of zero for both parties and will be reported to the Office of Judicial Affairs, as will any other form of cheating.

Ten percent will be deducted for unexcused late homework.

The project will be worked in teams of three. You may pick your partner(s) or I will pick them. More detail on the project will be handed out later.

Tentative Schedule Fall 2011

| | Topic | Text |
|----|-----------------------|--------------------------------------|
| 1 | T Introduction | Ch 1 |
| | R Software Lifecycles | Ch 2, Ch 3 |
| 2 | T Requirements | Ch 10 |
| | R Ethics, Project | Ch 1 (1.11), Handouts |
| 3 | T UML, Analysis | Ch 15, Ch 11 |
| | R Analysis | Ch 15, Ch 11, Handouts |
| 4 | T Object Design | Handouts |
| | R Object Design | Handouts , Ch 12 |
| 5 | T Object Design | Ch 12 |
| | R Catch up; review | Ch 1-3, 10-12, 15 |
| 6 | T In class midterm | Ch 1-3, 10-12, 15 |
| | R Implementation | Ch 13 (13.1-13.4), Handouts |
| 7 | T Testing | Ch 6, Ch 13 (13.6-13.11) |
| | R Testing | Ch 13 (13.5, 13. 12-13.26), Handouts |
| 8 | T Structured Analysis | Handouts |
| | R Structured Design | Handouts |
| 9 | T Maintenance | Ch 14, Handouts |
| | R Maintenance | Ch 14, Handouts |
| 10 | T Design Patterns | Ch 14, Ch 8, Handouts |
| | R T Catch up, Review | All |

Fin R (11/17/11) 8:00 PM - 10:00 PM Final Exam All

NOTE: There will be *no* early final exam – plan your travel accordingly. In case of a legitimate conflict, a makeup final can be arranged.

Note: T = Tuesday, R = Thursday.