

## Department of Computer Science CS 251 (Software Engineering I) Course Syllabus

## Faculty of Computers and Information

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Texts Pressman, R. S. (2009). Software engineering: a practitioner's approach. Dubuque, IA, McGraw-

Hill.

Webpage: <a href="http://highered.mcgraw-hill.com/sites/0073375977/information\_center\_view0/">http://highered.mcgraw-hill.com/sites/0073375977/information\_center\_view0/</a>

Ref. Sommerville, I. (2011). Software engineering. Harlow, England; New York, Addison-Wesley.

Webpage: <a href="http://www.cs.st-andrews.ac.uk/~ifs/">http://www.cs.st-andrews.ac.uk/~ifs/</a>

Stevens, P. and R. J. Pooley (2006). Using UML: software engineering with objects and

<u>components</u>. Harlow, England, Addison-Wesley. Webpage: <a href="http://homepages.inf.ed.ac.uk/perdita/Book/">http://homepages.inf.ed.ac.uk/perdita/Book/</a>

Prerequisite CS111 (it is very recommended that at least one programming course and a course in data structures are

studied).

**Objectives** Three main objectives are in this course: First, to develop the maturity of the programmer to consider very

important issues related to software than pure programming aspects. Second, to learn the UML as a design language. Third, to be very comfortable design using CASE tool, e.g., the open source Jdeveloper. This

course is the first part of a two-semester course; the second part is SWEII.

**Syllabus** The course covers the first 13 chapters of Pressman in lecturers; almost at the rate of one chapter per lecture.

The labs will cover the following:

- UML design from Stevens; almost the half of the book.

Following up the project progression and assigning grades.

- Using the CASE tool

Project 1- Groups should be formed in the first week.

2- Projects should be selected (from the offered list) or proposed by the end of second week.

3- Any fudging, copying, or any form of illegal reproduction results in getting a grade of -3 out of 30.

**Grading** Project: 50%, and Final Exam: 50%.