CS32200  Software Engineering  
Fall  2011, Prof. Jie Wei

Catalog Description
The software development life cycle from feasibility study to turnover to client. Documentation of design, program, and training materials. Rapid prototyping languages. Software development management: team roles and organization, the version control problem, maintenance issues. Use of CASE tools emphasized and illustrated in projects. Written reports and oral presentation of projects.

Course Goals
This course examines a comprehensive range of software engineering techniques and tools. Emphasis is placed on the theoretical as well as practical development of large software projects. Additional topics such as data base, digital library, graphics, and image representation will be also briefly introduced to better equip students with the state-of-the-art knowledge. Concrete experience in the application of the concepts discussed in class is acquired through a large phased group project together with quizzes/exams.

Topics
1. Introduction to Software Engineering
2. System Life Cycle and Methodologies
3. Software requirements analysis and system modeling
4. Software specifications
5. Software planning and management (Phase 1 report, Quiz)
6. System Design, especially OOD based on UML
7. Briefing of multimedia programming and advanced data structure and algorithm design (Phase 2 report, Midterm)
8. Brief introduction to DB and advanced programming topics
9. Development / Implementation /CASE tools
10. Systems testing (unit, system, acceptance, statistical, test plans)
11. Software maintenance and Evolution (system demo and final report, Final)

Grading
Projects 25%, Quiz 15%, Midterm 25%, Final 35%.

Textbook

Reference
Shari L. Pfleeger and Joanne M. Atlee, Prentice-Hall, 2008

Office hours
MW 12:30—1:30pm, Nac8/209

Course website:
http://www-cs.ccny.cuny.edu/~csjie/322.html