SWE 530 –Software Design Process

Instructor: Assist. Prof. H. Birkan YILMAZ (**Room**: 38, birkan.yilmaz@boun.edu.tr)

Reference books:
"Software Design," **Budgen, 2nd Edition, Addison Wesley, 2003.**
"Object Oriented Systems Analysis and Design Using UML," **Bennett, McRobb,Farmer, 4th Edition, McGraw Hill.**
"Object Oriented Analysis and Design" **J. Deacon, Addison Wesley.**

Tentative Outline: (Please note that these are not the weeks, these are the lecture topics)

Lecture 01: Overview of design. What is design in general and in engineering?
Lecture 02: Software design process
Lecture 03: Design in software development process
Lecture 04: Design qualities
Lecture 05-a: Describing a Design Solution
Lecture 05-b: Transferring Design Knowledge
Lecture 06: Some Design Representations
Lecture 07-a: The Rationale for Method
Lecture 07-b: Design Processes and Design Strategies
Lecture 08-a: Design Patterns, Part 1
Lecture 08-b: Design Patterns, Part 2
Lecture 09: Design Practices I - Stepwise Refinement
Lecture 10: Design Practices I - Incremental Design
Lecture 11: Design Practices I - Structured Systems Analysis and Structured Design
Lecture 12: Design Practices I - Jackson Structured Programming
Lecture 13-a: Design Practices II - Overview of main design notations in UML
Lecture 13-b: Design Practices II - Designing with Objects
Lecture 14: Design Practices II - Component-Based Design

Grading: (**A change of +- 5% may occur in the basis of evaluation!**)
    15% Quizzes (Quizzes will take place on the 3rd and 6th weeks)
    35% Assignments (3 or 4)
    20% Midterm Exam
    30% Final Exam