Wright State University

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Computer Science & Engineering Syllabi

College of Engineering & Computer Science

Spring 2012

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

Nikolaos Bourbakis
Wright State University - Main Campus, nikolaos.bourbakis@wright.edu

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CEG460/660: Introduction to Software Engineering
Spring Quarter, 2012, CSE Dept.

Instructor:
Professor Nikolaos Bourbakis, PhD
Office: 477 Joshi Engineering Center
Office Hours: T-R 12:00-1:00 or by appointment.
Office Phone: 775-5015
Email: **nikolaos.bourbakis@wright.edu**

Class Hours: T R 4:10– 5:25 P.M., Medical Science, Room 145.
Textbook: Object-Oriented Software Engineering, S.R. Schach, McGraw Hill, c 2008

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 and present a way of communication via UML. Hands-on experience is emphasized through the use of homework and a class project.

Project emphasis is on team-work
•Participate in collaborative design
•Work as a member of a project team
–If your team falls apart, grades will suffer
•Create and follow a project and test plan
•Create the full range of documents associated with a software product
•Complete a project on time

Project Preliminaries
•Turn in next Tuesday (April 5th):
•5 names
•Language of choice (can change later)
–Should be OO: Java, C++, etc.
–Must run at WSU (e.g. Unix or PC)

Objectives of the Class
•Appreciate Software Engineering:
–Build complex software systems in the context of frequent change
•Understand how to
–produce high quality software within time limits,
–while dealing with complexity and change
•Acquire managerial knowledge

–Understand the Software Lifecycle
•Process vs. Product
•Learn about different software lifecycles
•Acquire technical knowledge (main emphasis)

Tentative Schedule

Introduction	Ch 1
Software Lifecycles	Ch 2, Ch 3
Requirements	Ch 10
Ethics, Project	Ch 1 (1.11)
UML, Analysis	Ch 15, Ch 11
Object Design	Ch 12
Catch up; review	Ch 10-12, 13
Implementation	Ch 13 (13.1-13.4)
Testing	Ch 6, Ch 13 (13.6-13.11)
Structured Analysis	/Design Handouts
Maintenance	Ch 14
Design Patterns	Ch 14, Ch 8,
In class midterm	**May 1, 2012**

Beginning of the WORKSHOP Project
Final

Grading

Grading will be as follows:

Homework   10   (3 homeworks)
Project   40   workshop style
Midterm   20
Final Exam   30   Presentation + Written Report

*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.