

# CSCI 621 - Software Project Management

## Fall 2007

Department of Computer Science and Quantitative Methods  
College of Business Administration  
Winthrop University

Instructor: R. Stephen Dannelly, PhD  
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Office Hours: Tuesday, Wednesday, and Thursday 1:00-3:15pm  
also available by appointment

### Course Description

An introduction to the economics, metrics and management strategies required to plan and successfully execute a large software project. The fundamentals of software engineering, requirements, design and realizations are utilized to focus both software professionals and project managers on process models and practices.

### Course Objectives

After successfully completing this course, the student will

- understand the strengths, weaknesses, and applicability of various development models
- have a basic knowledge of project estimation tools and techniques
- understand the role of metrics (both process metrics and product metrics) in software project management
- be able to create a schedule for a complex project
- be able to conduct risk analysis and write a risk management plan
- understand fundamental principles of project team organization
- understand and be able to apply fundamental principle of software quality assurance, such as formal reviews and source code testing
- understand the role and contents of various project documents, as well as established industry standards for such documents, such as SRSs, SOWs, etc.

### Prerequisites

- CSCI 207 Computer Science I or basic knowledge of programming
- QMTH 205 Statistics I or basic knowledge of statistics

### Text

*Quality Software Project Management*  
by Futrell, Shafer, and Shafer  
Prentice Hall Inc

### Attendance Policy

Exam material will be based on class lectures and discussions. Not all lecture material will come from the textbook. Hence, it will be extremely difficult to successfully complete the course without coming to class.

## Grading Policy

Letter grades will be based on a 10point scale. In other words,  
90.00 to 100 is an A,  
80.00 to 89.99 is a B,  
etc...

Mid-Term Exam:	30%
Final Exam:	40%
Paper and Presentation:	30%

## Paper and Presentation

Each student will select a topic that relates to the content of this course and write a research paper on that topic. The choice of topic is left to the student, mostly. The course instructor must approve the topic. The topic must be one that is not otherwise substantially covered in this course or another course. You may choose to write a review of case studies, or a review of available software tools, or you may be interested in...

The paper must be at least 10 double-spaced pages and no more than 15 pages. Use appropriate citations! Minimum of five different sources.

Each student must present her/his findings in class. Presentations should take at least 30 minutes.

Topic Approved by Instructor:	Oct 29
Tentative Outline Completed:	Nov 13
In-Class Presentations:	Nov 27
Paper Due:	Dec 12

## COLLEGE OF BUSINESS EXPECTATIONS REGARDING PROFESSIONALISM IN THE CLASSROOM

The College of Business Administration is a professional organization with a well-defined and widely disseminated mission of student development. Accordingly, each class represents a gathering of professionals and professionals-in-training. The instructor's job as a professional is to deliver quality instruction in each class, to start and end each class on time, to be responsive to student perspectives, issues and questions, and to treat each student respectfully. The student's job, as a professional-in-training is to be prepared for class, to be on time, to attend all classes, and to be respectful of others in the classroom.

In accordance with and pursuant to these roles the following guidelines were established to specify to students (both present and prospective) faculty expectations regarding their behaviors

1. **Students will attend all class meetings.** There are no automatically "excused" absences. In the event that you will be unable to attend a class session, you should inform your professor in advance as a matter of professional courtesy just as you would/should with an employer.
2. **Students will arrive in advance of the beginning of the class session.** Late arrivals are disruptive, inconsiderate and unprofessional. Professors may make arrangements for delinquents, but are not obliged to do so. Those not present at the beginning of the classroom period will be considered absent.
3. **Students will not converse among themselves during class except when instructed to do so.** When a student creates a disturbance in the classroom, instructors will either ask the student to desist immediately or speak to the student at the conclusion of class. Repeat offenders will be sanctioned.
4. **Students will not leave class before its conclusion.** Early departures are disruptive, inconsiderate and unprofessional. Professors may make arrangements under some circumstance, but are not obliged to do so. Those not present at the conclusion of the classroom session will be considered absent.
5. **Students will have procured textbook/materials prior to the first class.** Instruction will begin with the first class meeting and consume the remainder of the class period.

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## STUDENTS WITH DISABILITIES

Winthrop University is dedicated to providing access to education. If you have a disability and need accommodations, please contact Gena Smith, Coordinator, Services for Students with Disabilities, at 323-3290, as soon as possible. Once you have your Professor Notification Form, please tell me so that I am aware of your accommodations **well before** the first exam.

## **Tentative Schedule CSCI 621 - Fall 2007**

<u>Date</u>	<u>Topic</u>	<u>Text Chapter</u>
Aug 21	Course Overview, Development Life Cycles	1, 3, 4
Aug 28	Domain Processes, The Project Team	5, 6
Sept 4	Defining Goal, Scope, Work Packages, and Activities	7, 8, 9
Sept 11	Estimation, COCOMO o'plenty	10, 11
Sept 18	Roles, Organization, Scheduling	12, 13, 15
Sept 25	Gathering Requirements and Writing Specifications	16, 17
<b>Oct 2</b>	<b>Mid-term Exam</b>	
Oct 9	Risk Analysis	18
<i>Oct 16</i>	<i>Fall Break</i>	
Oct 23	even more Metrics	20, 21, 26
Oct 29	Unit Testing, Integration Testing, Validation	23
Nov 6	Configuration Management	31
Nov 13	Intro to Quality Assurance	30
Nov 20	Quality Standards (details of ISO9001 and SEI CMM)	
<b>Nov 27</b>	<b>Student Presentations, Review</b>	

**Final Exam 11:30am on Saturday December 8<sup>th</sup>**