COURSE DESCRIPTION

Dept., Number	**CSCI 335**	Course Title	**Software Project Management**
Semester hours	3	Course Coordinator	John Stamey
		URL (if any):	

Current Catalog Description

(Prereq: Computer Science 330 and Statistics 201/201L) This course will cover tools and techniques in software project management based on the Project Management Body of Knowledge from the Project Management Institute.

Textbook

Project Management, 4th Edition by Clifford Gray and Erik Larson

References

Course Goals

1. To provide student with a working knowledge project management terminology consistent with that found in PMI's Project Management Body of Knowledge
2. To provide student with an understanding of Scope Statements, Work Breakdown Structures, software project cost estimation, CPM and PERT
3. To provide student with an understanding of risk management, resource scheduling and Earned Value Analysis
4. To provide student with an understanding of project selection techniques
5. To provide students with a writing-intensive course

Prerequisites by Topic

1. Programming in an object-oriented programming language
2. Development of specifications for a small to medium-sized software system

Major Topics Covered in the Course

1. Project Scope Statements – 6 hours
2. Work Breakdown Structures – 3 hours
3. Project Cost Estimation – 3 hours
4. Pert and CPM – 6 hours
5. Risk Analysis – 3 hours
6. Resource Allocation – 3 hours
7. Earned Value Analysis – 3 hours
8. Project Selection – 3 hours
9. Agile Project Management – 3 hours

Laboratory projects (specify number of weeks on each)

1. Scope Statement (1 week)
2. Project Network Diagram and Computation of Critical Path (2 weeks)
3. PERT (1 week)
4. Earned Value Analysis (1 week)
5. Development of a small software project with appropriate scope statement, risk management plan, project snapshot, and project wrapup (6 weeks)

Estimate Curriculum Category Content (Semester hours)

Area	Core	Advanced	Area	Core	Advanced
Algorithms			Data Structures		
Software Design			Prog. Languages		
Comp. Arch.					

Oral and Written Communications

Every student is required to submit at least __3__ written reports (not including exams, tests, quizzes, or commented programs) of typically __4-5__ pages and to make _____ oral presentations of typically _____ minute's duration. Include only material that is graded for grammar, spelling, style, and so forth, as well as for technical content, completeness, and accuracy.

Social and Ethical Issues

Please list the topics that address the social and ethical implications of computing covered in all course sections. Estimate the class time spent on each topic. In what ways are the students in this course graded on their understanding of these topics (e.g., test questions, essays, oral presentations, and so forth)?

Theoretical Content

Please list the types of theoretical material covered, and estimate the time devoted to such coverage.

Problem Analysis

Please describe the analysis experiences common to all course sections.

Traditional tools of project management along with techniques of Agile Project Management (SCRUM) will be presented.

Solution Design

Please describe the design experiences common to all course sections.

Students will work as a team in production and creation of a small project, create and monitored with traditional project management techniques.