

# Program Management

## Student Originated Software – Winter 2002

### PROGRAM DESCRIPTION

The main objective of this part of the program is to learn the concepts of managing software development projects and to gain the ability to plan and manage such a project. We will start by exploring the nature of projects and software development lifecycles. Our primary focus will be project planning: determining project scope, identifying tasks and milestones, creating a schedule, monitoring progress and controlling changes. We will also look at the characteristics of successful and failed projects. We will utilize *Microsoft Project* for creating project schedules.

### LEARNING OBJECTIVES

BY THE END OF THE QUARTER, EACH OF US WILL BE FARTHER ALONG IN OUR UNDERSTANDING OF:

- ◇ Software development life cycle
- ◇ Project constraints of time, quality, cost
- ◇ Conflict resolution
- ◇ Controlling change
- ◇ How teams function
- ◇ Assessing and managing risks
- ◇ Scope creep and hope creep

BY THE END OF THE QUARTER, EACH OF US WILL HAVE IMPROVED ABILITIES TO:

- ◇ Write clear goal and objective statements
- ◇ Establish measurable criteria for success
- ◇ Identify relevant assumptions, risks, and obstacles
- ◇ Determine tasks and milestones
- ◇ Generate a Work Break Down Structure
- ◇ Identify the critical path in a project
- ◇ Create a project schedule
- ◇ Classify defects by priority and severity.

### EXPECTATIONS AND REQUIREMENTS:

To earn credit, students must attend weekly lectures, complete assignments and perform satisfactorily on final exam. Students will be evaluated on the basis of their understanding of the project management process and methods, as reflected in being able to explain key concepts through participation in discussions, pop quizzes, and exams. They will also be evaluated on the basis of their ability to implement these basic concepts through assignments.

### TEXT

*On Time Within Budget: Software Project Management Practices and Techniques*, 3rd Edition  
by E. M. Bennatan

### LOCATION AND MEETING TIME

Jan 10 – Feb 7 (first five weeks of winter quarter)

LH1 Mon 10 – 12

LH2 Wed 10 – 11

TBD Thu 10 – 12 Weeks 1 & 3 only

### SCHEDULE

Week 1	Introduction to project management. The software development lifecycle. Project planning. Product definition.	Chapter 1, 4
Week 2	Work Break Down Structure: identifying milestones, tasks, and estimates.	Chapter 6, 12
Week 3	Schedules. Determining the critical path. Communication, Risk management	Chapter 11, 2
Week 4	Tracking progress of project. Change Process Control. Team Dynamics. Problem escalation, conflict resolution.	Chapter 5,
Week 5	Quality Assurance. Release management. Deployment. Project Closeout. * * * <i>Final</i>	Chapter 8

