

## Course Syllabus

---

# Establishing a Project Management Foundation using Microsoft Project 2007

## Course Overview

This course delivers the fundamental scheduling skills that you need to manage projects successfully with Microsoft Office Project 2007, and prepares you for the Managing Enterprise Projects using Microsoft Project Server 2007 course. Mastering the Microsoft Project scheduling engine is the key to enjoying your work with the software. This course shows you how to drive the tool through each stage of the project management life cycle and offers multiple best practices for using the software while defining, planning, executing, and closing a project. This course also teaches you how to use all of the **new features** included in the software. Framed around PMI's project life cycle, the course content is methodology-agnostic and focuses on hands-on learning methods.

## Target Audience

Everyone who manages projects using Microsoft Office Project 2007 should take this course, whether in an enterprise or desktop-only environment. We target this course at the needs of full-time project managers, as well as those who function as project schedulers or project support technicians.

## Pre-Requisites

Although not required, it is helpful for students to have hands-on project management experience or a high-level understanding of project management principles.

## Learning Objectives

After completing this course, you will be able to:

- Describe the stages of the project management process.
- Understand the Microsoft Project user interface.
- Understand the Microsoft Project Data Model as it relates to Views, Tables, Filters, and Groups.

- Define a new project.
- Perform all required task planning and understand how to properly use task dependencies and task constraints.
- Add resources to a project and assign resources to tasks.
- Save a baseline for a project.
- Enter task progress using three different methods of tracking progress.
- Analyze project variance.
- Create custom Views, Tables, Filters, and Groups.
- Revise a project based on project variance.
- Change a project based on change control methodologies and rebaseline the project using multiple methods.
- Report on project progress by printing Views and Reports, and by using Visual Reports with Microsoft Office Excel and Visio.
- Close a project.

## Topical Outline

### **Project Management Overview**

#### **What is a Project?**

#### **Understanding the Project Management Process**

*Definition*

*Planning*

*Execution*

*Control*

*Closure*

### **Microsoft Office Project 2007 Overview**

#### **Introducing the Global.mpt File**

#### **Using the Project Guide**

#### **Understanding the Planning Wizard**

#### **Navigating in Microsoft Office Project 2007**

*Tips for Using the Scroll Bars*

*Using the Zoom In and Zoom Out buttons*

*Using the Scroll to Task button*

*Using Screen Tips and Tool Tips*

## **Understanding Gantt Chart Symbols**

*Reading a Gantt Chart*

*Understanding Gantt-Optimized Scheduling Benefits*

## **Creating a Three-Tiered Timescale Bar**

## **Inside Microsoft Office Project 2007**

### **Understanding the Microsoft Project Data Model**

#### **Understanding Views**

*Using Single-Pane and Combination Views*

#### **Understanding Tables**

#### **Understanding Filters**

#### **Understanding Groups**

## **Project Definition**

### **Defining a New Project**

*Step #1 – Set the Project Start Date*

*Step #2 – Enter the Project Properties*

*Step #3 – Display the Project Summary Task*

*Step #4 – Set the Project Working Schedule*

*Setting the Daily Working Schedule*

*Creating a New Base Calendar*

*Step #5 – Set Options Unique To This Project*

*Step #6 – Save the Project*

## **Project Task Planning**

### **Understanding the Task Planning Process**

*Creating a Task List Manually*

*Using a Template*

### **Understanding Change Highlighting**

#### **Using Basic Task Planning Skills**

*Entering and Editing Tasks*

*Moving Tasks*

*Inserting Tasks*

*Deleting Tasks*

*Creating the Work Breakdown Structure (WBS)*

*Creating Milestones*

*Adding Task Notes and Cell Background Formatting*

## **Using Task Dependencies**

*Understanding Task Dependencies*

*Setting Task Dependencies*

*Removing a Task Dependency*

*Using Lag Time with Dependencies*

*Using Lead Time with Dependencies*

*Using Alternate Methods to Set Dependencies*

## **Setting Task Constraints and Deadline Dates**

*Setting Constraints*

*Adding Notes on Tasks with Constraints*

*Understanding Flexible and Inflexible Constraints*

*Understanding Planning Wizard Messages about Constraints*

*Using Deadline Dates*

*Viewing Missed Constraints and Deadline Dates*

## **Assigning Task Calendars**

## **Understanding Duration-Based and Effort-Based Planning**

*Estimating Task Durations*

## **Understanding Task Drivers**

## **Creating Recurring Tasks**

## **Project Resource Planning**

### **Defining Project Resources**

### **Entering Basic Resource Information**

### **Entering Custom Resource Information**

*Entering General Information*

*Changing Working Time*

*Setting an Alternate Working Schedule*

*Entering Nonworking Time*

*Setting Working Schedule Changes*

*Entering Cost Information*

*Entering Resource Notes*

*Using the Custom Fields Page*

## **Project Assignment Planning**

### **Understanding Assignments**

*Using a Work Estimation Methodology*

*Assigning Resources Using a Best Practice*

**Using the Task Entry View**

**Understanding the Duration Equation**

*Understanding Task Types*

*Understanding Programming Biases*

**Setting the Cost Rate Table**

**Assigning Material Resources**

**Using Effort Driven Scheduling**

*Using Non-Effort Driven Scheduling*

**Using the Assign Resources Dialog**

*Using Resource Substitution*

**Understanding Resource Overallocation**

*Locating Resource Overallocations*

**Leveling Overallocated Resources**

*Using a Leveling Methodology*

*Leveling an Overallocated Resource*

*Viewing Leveling Results*

*Clearing Leveling Results*

*Setting Task Priority Numbers*

**Project Execution**

**Understanding the Execution Process**

**Viewing the Critical Path**

**Working with Project Baselines**

*Saving a Project Baseline*

*Saving a "Rolling Baseline"*

*Saving Over a Previous Baseline*

*Viewing the Project Baseline*

*Clearing the Project Baseline*

*Using Additional Baselines*

**Tracking Project Progress**

*Entering % Complete*

*Entering Actual Work and Remaining Work*

*Using a Daily Timesheet*

**Rescheduling Uncompleted Work**

## **Variance Analysis**

### **Understanding Variance**

*Understanding Variance Types*

*Understanding Actual vs. Estimated Variance*

### **Analyzing Project Variance**

*Analyzing Date Variance*

*Analyzing Work Variance*

*Analyzing Cost Variance*

### **Using Custom Views to Analyze Variance**

*What Is A View?*

*Creating a New Custom View*

### **Creating a Custom Table**

### **Creating a Custom Filter**

### **Creating a Custom Group**

### **Creating a New Custom View**

*Creating a Combination View*

### **Using the Organizer**

*Copying Custom Objects*

*Renaming and Deleting Custom Objects*

## **Plan Revision and Change Control**

### **Revising a Project Plan**

*Potential Problems with Revising a Plan*

### **Using a Change Control Process**

### **Inserting New Tasks in a Project**

### **Rebaselining Your Project**

*Rebaselining the Entire Project*

*Backing Up an Original Baseline*

*Rebaselining Only Unstarted Tasks*

*Saving a Baseline for Selected Tasks*

### **Viewing Multiple Baselines**

## **Project Reporting**

### **Reporting in Microsoft Office Project 2007**

#### **Printing Views**

*Using Page Setup*

*Creating a Header or Footer*

*Using the Print Dialog*

#### **Printing Reports**

*Understanding Report and View Interaction*

### **Understanding Report Definition**

#### **Creating Custom Reports**

*Creating Custom Monthly Calendar Reports*

*Creating Custom Crosstab Reports*

#### **Using Visual Reports**

*Viewing a Visual Report*

*Customizing a Microsoft Office Excel 2007 Visual Report*

*Customizing a Microsoft Office Visio 2007 Visual Report*

*Saving Local OLAP Cube Data*

#### **Creating Visual Report Templates**

*Editing Visual Report Templates*

*Managing Your Visual Report Templates*

## **Project Closure**

### **Using Project Closure Methodologies**

#### **Closing a Project**

*Cancelling Unnecessary Tasks*

*Marking Milestones as Complete*

#### **Saving a Completed Project as a Template**

*Creating a New Project from a Template*

#### **Using the Compare Project Versions Tool**