

## Project Management Essentials

In today's business world, project management skills are indispensable. This course prepares you to implement the principles and techniques of project management immediately within your organization or team. By applying effective skills, tools, and techniques you will deliver projects within the constraints of time, cost, quality, and scope. In addition, you will learn to develop realistic project schedules, use the critical path method, manage project risks, and respond to real-world scenarios. Strategies for applying and preparing for the PMP certification exam will be discussed. (8 PDUs)

### COURSE BENEFITS

This course focuses on the essential skills, tools and techniques to successfully plan, manage, and deliver projects while meeting or exceeding customer expectations. In addition, effective techniques to develop realistic project schedules, use critical path method, manage project risks, and respond to real-world scenarios will be presented.

Upon completion of this course, you will be able to:

- Understand the philosophy of project management and best practices
- Develop realistic project schedules considering resources and risks
- Integrate and execute the basic functions of project initiating, planning, execution, control and closing throughout the life cycle of a project
- Use a project management scheduling software system

### COURSE TOPICS INCLUDE

#### **Projects and Project Management**

- Project Life Cycles and Processes
- Project Management Body of Knowledge
- Essential Skills for Project Managers

#### **Project Initiation**

- Develop Project Charters

#### **Project Planning**

- Develop Project Plans
- Work Breakdown Structures and Estimating
- Resource Assignments and Utilization

#### **Project Scheduling Concepts**

- Project Scheduling Elements
- Network Diagrams and Gantt Charts
- Critical Path Concepts

#### **Project Execution and Control**

- Cost, Time, and Quality Targets
- Team Motivation
- Earned Value Analysis

### **Project Risk Management**

- Risk Identification and Management
- Risk Response Strategies
- Qualitative and Quantitative Risk Analysis

### **Project Closing**

- Project Archives
- Formal Project Acceptance
- Lessons Learned

### KNOWLEDGE AREAS ADDRESSED

This course addresses the following knowledge areas of the Project Management Institute's *A Guide to the Project Management Body of Knowledge*:

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resources Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management
- Project Stakeholder Management

### TARGET AUDIENCE

Project managers, project team members, executives, functional managers, and anyone involved with planning, implementation and successful completion of projects.

## Project Management Essentials Course Outline

### 1. Project Management Framework

#### 1.1. Key Concepts, Terminology and Roles

- Project Management Objective
- Why Project Management Matters
- What is a Project?
  - Project Examples
- What is Project Management?
  - Project Failure – Survey Data
  - Why Formal Methodology?
  - Advantages of Using Formal Project Management Methodology/Process
- Roles and Responsibilities
  - Project Sponsor, Project Champion, Client Project Liaison, Project Manager, Stakeholder
- Project Success and Project Success Factors
- Project Portfolio: An Organizational View
- Project Management and Project Portfolio Management

#### 1.2. The Project Triangle and Core PM Processes

- The Project Triangle
- Five Process Groups
- Levels of Activity and Project Phases

#### 1.3. Project Management Process Framework

- The Project Lifecycle
- The Project Management Methodology
- **System Development Life Cycle (SDLC) Methodologies**
  - Systems Development Lifecycle
  - The Waterfall Model
  - SDLC Methodologies
- **Agile Methodologies**
  - Agile Methodologies & Benefits of an Agile Approach
- Project Management and SDLC
- Defining Project Size
- Project Deliverables by Phase

#### 1.4. Project Request Lifecycle (Delete or Update)

- Project Request Lifecycle
- Project Request Statuses

#### 1.5. Project Portfolio Prioritization Process

- Problem Definition
- Why Project Prioritization
- Business Strategy vs. Technology Strategy

- Portfolio Prioritization Goals and Objectives
- Building Portfolio Consensus
- Portfolio Owner
- Portfolio Decision Hierarchy
- Project Prioritization Step by Step Process
- Project Evaluation Criteria and Prioritization
- Project and Portfolio Management System (PPM) Software

## 2. Initiating the Project

### 1.1. Submitting a Project Request

### 1.2. Creating the Project Charter

### 1.3. Defining Requirements

- What is Requirement Analysis
- What is a Requirement
- Understanding Requirements: An Example
- Capturing Requirements
- Structure of a Requirements Document
- Sources of Requirements
- Role of Good Requirements
- Benefit of a Requirements Document
- Requirements: Customer's Responsibility
- Requirements: Project Team's Responsibility
- Requirements Best Practices

## 3. Defining Project Work

### 1.1. Work Breakdown Structure (WBS)

- Work Packages
- Approaches to Developing a WBS
  - Example: Creating a WBS using the Mind-Mapping Technique
  - Example: Creating a WBS using Microsoft Project
- Work Breakdown Structure Benefits

### 1.2. Responsibility Matrix

## 4. Scheduling the Work and Estimating

### 1.1. Project Scheduling Elements

- Importance of Project Schedules
- Gantt Chart
  - Mitigate Schedule Risk with Milestones
  - SMART Criteria for Milestones
  - Milestone Examples
  - Milestones Best Practice
- PERT Chart
  - What is a PERT Chart
  - Sample PERT Chart
  - Determining Expected Completion Times
- Critical Path Method
  - Determining the Critical Path

- Using the Critical Path to Shorten a Project Schedule
  - Crashing Examples
  - Fast Tracking Examples
- Importance of Updating the Critical Path Data

## 1.2. Estimating Project Cost

- Cost Estimating
- Types of Cost Estimates
- Cost Estimate Examples
  - Sample Project Cost Estimate
  - Sample Project Cost Baseline
- Typical Problems with Cost Estimates

## 1.3. Estimating Work Effort

- Estimating Effort
- Bottom-up Estimates
- Three-Point Estimates

## 5. Executing the Plan

### 1.1. Creating the Project Communications Plan

- Defining the Project Communications Plan
- Identifying Information Needs
- Sample Project Communication Plan

### 1.2. Measuring Project Progress

- Reporting on Project Status
- Project Statuses
- Project Status Report Template

### 1.3. Managing Scope Change

- Project Change Request Form

## 6. Risk Management

### 1.1. Defining Project Risks

- Positive Risks vs. Negative Risks
- Risk Examples

### 1.2. Project Risk Management

- Benefits of Project Risk Management
- Project Risks and Risk Categories

### 1.3. Risk Identification and Management

- Risk Identification
- Tools and Techniques
  - Brainstorming, Delphi Technique, Interviewing, SWOT Analysis
  - Sample Risk Log

### 1.4. Qualitative Risk Analysis

- Probability/Impact Matrix
- Top Ten Risk Item Tracking

## 1.5. Risk Response Strategies

- Risk Response Planning
- Risk Mitigation Strategies
- Examples: Risk Mitigation Strategies for Technical, Cost, and Schedule Risks

## 7. Closing the Project

### 1.1. Project Acceptance and Sign-Off

### 1.2. Lessons Learned

### 1.3. Project Documents

## 8. Applying for the PMP Certification Exam

## 9. Tips for Preparing for the PMP Certification Exam

## 10. Additional Resources