

## Managing IT Project Management

### 3 Day Workshop – Course PM13

#### PM13 – Managing IT Project Management Concepts

Course ID: PM13

**Credits: 21 PDUs**

**Course Duration: 3 days**

**Course Level: Basic/Intermediate**

#### **Course Description:**

In today's dynamically changing business environment projects are initiated under tighter budgetary, resource and time constraints than ever before. This seminar focuses on the core project management skills required to manage an Information Technology project and will provide the attendees with proven "real life" tools and techniques applied to an IT Project case study. This course is compliant with the PMBOK® Guide Fifth Edition.

#### **Course Description:**

In today's dynamically changing business environment projects are initiated under tighter budgetary, resource and time constraints than ever before. This seminar focuses on the core project management skills required to manage an Information Technology project and will provide the attendees with proven "real life" tools and techniques applied to an IT Project case study.

#### **Attendee Profile:**

Information Systems Project Leaders, Team Leaders, Project Managers, Line of Business I.S. Coordinators, who are responsible for the delivery of projects in a cross-functional environment.

#### **Course Goals:**

- Develop a foundation in core project management concepts.
- Apply core project management concepts to managing an information technology project.
- Discover and apply project management tools and techniques applicable to each phase of a System Development Life Cycle (SDLC).

#### **Course Outline:**

##### **Unit 1 – Introduction**

Course Goals

Student Introductions

Class Objectives

Class Materials

Class Norms

## **Unit 2 – The Project Management Framework**

What is a Project?

*Discussion – Why are IT Projects So Challenging?*

Challenges with IT Projects

How do you define success?

Project Constraints

Where do projects come from?

Why is there interest in project management?

What is Project Management?

Goals of Project Management

Role of the Project Manager

Program Management/Portfolio Management

Role of the PMO

Phases & Life Cycles

Product Life Cycle

Life Cycle Models

Waterfall Model

Spiral Model

Incremental Model

Evolutionary Model

Agile Model

*Exercise – Choose a Life Cycle Model*

What is a Process?

Underlying PM Concept

## **Unit 3 – Concept Phase**

Business Case for the project

Project Initiation

Stakeholders

Stakeholder Analysis

*Exercise – Identify Project Stakeholders*

Project Charter

Project Objectives

*Exercise – Develop a Project Charter*

Project Approach/Methodology  
Managing Uncertainty  
Progressive Elaboration  
Rolling Wave Planning

#### **Unit 4 – Analysis Phase**

Analysis Phase  
Planning Processes  
Project Management Plan  
The Management Plans  
Project Scope Management Plan  
*Exercise – Review a Project Scope Management Plan*  
Gathering Requirements  
Requirements Analysis  
Requirements Gathering Techniques  
*Exercise – Gather a project's Business Requirements*  
Prioritizing Requirements  
*Exercise – Prioritize the Requirements*  
Configuration Management System  
Requirements Management Plan  
Scope Statement  
Assumptions  
Constraints  
*Exercise – Create a Project Scope Statement*  
Work Breakdown Structure (WBS)  
Product-oriented WBS  
Process-oriented WBS  
Steps for Decomposing a project  
*Exercise – Develop a WBS*

#### **Unit 5 – Design Phase**

Developing the schedule  
Determining the Activities  
Activity Lists  
*Exercise – Develop an Activity List*  
Activity Dependencies  
Schedule Network Diagrams  
Precedence Diagramming Method (PDM)  
Types of PDM Dependencies  
Leads and Lags  
*Exercise – Create a Project Schedule Network Diagram*  
Estimating Task Durations  
Duration vs. Effort  
Estimating techniques  
*Exercise – Estimate Activity Durations*

Estimate Resource Requirements  
Developing the Schedule  
Schedule Analytical Techniques  
Critical Path Method (CPM)  
*Exercise – CPM Calculation*  
CPM Critical Path  
*Exercise – Develop the Project Schedule and Identify the Critical Path*  
Gantt Charts  
Schedule Compression  
*Exercise – Compress a project schedule*  
Resource Leveling  
Schedule Reserves  
Developing the Project Budget  
Cost Baseline Curve  
Cost Estimates  
Determining the Cost Baseline  
Cost Reserves  
*Exercise – Develop a high-level Project Budget*  
What is Quality?  
Cost of Quality  
Product vs. Process Quality  
Planning for Quality  
The Quality Management Plan  
Quality Management Plan Components  
*Exercise – Review a Project Quality Management Plan*  
Planning Project Communications  
Communication Concerns  
Project Communications Management Plan Components  
Communications Planning Table  
*Exercise – Create a Communications Plan*  
Project Risk  
Risk Planning  
Risk Characteristics  
Risk Management – A Structured Approach  
Risk Management Planning  
Risk Identification  
*Exercise – Identify Project Risks*  
Risk Assessment  
What is a Probability/Impact Grid?  
*Exercise – Assess the previously identified risks*  
Responding to Risks  
Risk Response Strategies  
*Exercise – Plan Risk Responses*  
Contracting on a Project  
Setting the Performance Measurement Baselines

Variance Analysis

**Unit 6 – Build Phase**

Project Plan Execution  
Distributing Project Information  
Quality Assurance  
Project Team Development  
Stages of team Development  
Risk Tracking  
Calculating Variance

*Exercise – Determining variances off the project plan*

**Unit 7 – Test Phase**

Tracking and Controlling Activities  
Project Reviews  
Performance Reporting  
Quality Control  
Testing  
Risk Control  
Issues Management  
Reacting to Variances

*Exercise – Make recommendations for dealing with project variances*

Scope Creep  
Change Control Process  
Change Requests

**Unit 8 – Deploy Phase**

Formal Acceptance  
Transition Documentation  
Transitioning the team

*Discussion – What typically happens during your project's deployment?*

**Unit 9 – Project Closeout**

Maintenance/ Support Activities  
Maintenance/ Support Concerns  
Formal Project Closure

*Discussion – What typically happens during project closeout?*

Contract Closure  
Administrative Closure  
Project Archives  
Lessons Learned

**Course Exercises:**

This seminar uses the context of an IT project case study to allow the participant to practically apply the tools and techniques covered in the class. Using this case study, the participants, working in teams, will work on the following exercises:

1. Why are IT projects challenging?
2. Why is there interest in project management?
3. Choose an appropriate Life Cycle
4. Perform a Stakeholder Analysis
5. Create a Project Charter
6. Create a Project Scope Statement
7. Review a Project Scope Management Plan
8. Perform Requirements Analysis and Prioritization
9. Create a Work Breakdown Structure (WBS)
10. Develop an Activity List
11. Create a Project Schedule Network Diagram
12. Estimate Activity Durations and Resources Required
13. Develop the project schedule and identify the critical path
14. Compress a project schedule
15. Develop a high-level project budget
16. Define Project and Product Quality
17. Review a Project Quality Management Plan
18. Create a Project Communications Management Plan
19. Identify project risks
20. Assess project risks previously identified
21. Develop risk responses
22. Determine variance from a project plan
23. Make a recommendation for dealing with project variances
24. Perform Change Control
25. Perform Project Closeout