

Course Outlines

Course Name	PMP Exam Preparations Course
Conducted By	Techno Management
Duration:	5 Days
Preparations	Classroom with projector, whiteboard and flipchart.
Audience	Project Managers applying for PMP Exam
Pre-Requisites	<ul style="list-style-type: none">• General Project Management Experience• Pre-Qualifications for the PMP Exam
General Notes	<ul style="list-style-type: none">• Essential Project Management Knowledge• Practical Project Experience

Course Outlines:

Day 1

1. The Project Management Framework

1.1. The Nature of PROJECTS

- 1.1.1. Project Examples
- 1.1.2. Programs
- 1.1.3. Project Management

1.2. The Project Life Cycle

- 1.2.1. Project management Processes
- 1.2.2. Project Management Process Groups Interactions
- 1.2.3. Knowledge Areas

2. Initiation

2.1. Project Selection Criteria

- 2.1.1. Capital Budgeting
- 2.1.2. Selection Criteria Example
- 2.1.3. Project Evaluation Techniques
- 2.1.4. Feasibility Analysis
- 2.1.5. Cost-benefit Analysis
- 2.1.6. Cost-benefit Analysis Example

2.2. Project Selection Decision Models

- 2.2.1. Decision Model Examples
- 2.2.2. Scoring and Rating Systems

2.3. Select a Project

2.4. Project Charter

2.5. Project Stakeholders

- 2.5.1. Project Stakeholders Example
- 2.5.2. Working with Stakeholders

2.6. Project Manager Selection Criteria

- 2.6.1. Project Manager Selection Criteria Example
- 2.6.2. Project Manager Letter of Assignment

2.7. Develop Preliminary Project Scope Statement

- 3.3.2. Code of Accounts
- 3.3.3. Develop a Work Breakdown Structure (WBS)

3.4. Activity Definition

- 3.4.1. Activity
- 3.4.2. Activity List

3.5. Activity Sequencing

- 3.5.1. Activity Dependencies
- 3.5.2. Precedence Relationships
- 3.5.3. Lag and Lead
- 3.5.4. Project Network Diagrams
- 3.5.5. Dummy Activities
- 3.5.6. Arrow Diagramming Method (ADM) Example
- 3.5.7. Precedence Diagramming Method (PDM) Example
- 3.5.8. Hammock Activities
- 3.5.9. Program Evaluation and Review Technique (PERT)
- 3.5.10. Conditional Diagramming Methods
- 3.5.11. GERT Network Diagram with Loop Example

3.6. Activity Resource Estimating

- 3.6.1. Identify required resources
- 3.6.2. Resource assignment

3.7. Activity Duration Estimating

- 3.7.1. Activity Duration Estimates
- 3.7.2. Duration
- 3.7.3. Elapsed Time
- 3.7.4. Effort
- 3.7.5. Analogous Estimating Technique
- 3.7.6. Quantitatively-based Durations
- 3.7.7. Reserve Time
- 3.7.8. PERT Estimating
- 3.7.9. Acquire Activity Duration Estimates

3.8. Schedule Development

- 3.8.1. Mathematical Analysis
- 3.8.2. Standard Diagramming Notations
- 3.8.3. The Critical Path
- 3.8.4. Project Schedule
- 3.8.5. Schedule Management Plan
- 3.8.6. Fast Tracking
- 3.8.7. Crashing
- 3.8.8. A Simulation
- 3.8.9. Resource leveling
- 3.8.10. Develop a Project Schedule
- 3.8.11. Determine Resource Requirements
- 3.8.12. Resource Planning
- 3.8.13. Project Resources

Day 3

3.9. Cost Estimating

- 3.9.1. Project Cost

Day 2

3. Planning

3.1. Scope planning

- 3.1.1. Scope Statement
- 3.1.2. Product Analysis
- 3.1.3. Alternatives Identification
- 3.1.4. Scope Management Plan

3.2. Scope definition

- 3.2.1. Scope Statement

3.3. Create Work Breakdown Structure (WBS)

- 3.3.1. The Work Breakdown Structure (WBS)

- 3.9.2. *Types of Estimates*
- 3.9.3. *Analogous Estimating Technique*
- 3.9.4. *Parametric Modeling Estimating Technique*
- 3.9.5. *Bottom-up Estimating Technique*
- 3.9.6. *Estimate Project Costs*
- 3.10. Cost Budgeting**
 - 3.10.1. *Cost Baseline*
 - 3.10.2. *Cost Assignment Methods*
- 3.11. Quality Planning**
 - 3.11.1. *Quality*
 - 3.11.2. *Cost of Quality*
 - 3.11.3. *Standards and Regulations*
 - 3.11.4. *Operational Definitions*
 - 3.11.5. *Checklists*
 - 3.11.6. *Flowcharts*
 - 3.11.7. *Cause-and-Effect Diagram Example*
 - 3.11.8. *Process Flowchart Example*
 - 3.11.9. *Benchmarking*
 - 3.11.10. *Design of Experiments*
 - 3.11.11. *Create a Quality Management Plan*
- 3.12. Human Resources Planning**
 - 3.12.1. *Organizational Structures*
 - 3.12.2. *Relative Authority in Organizational Structure*
 - 3.12.3. *Organization Chart*
 - 3.12.4. *Organizational Breakdown Structure (OBS)*
 - 3.12.5. *Functional Organizational Structure Example*
 - 3.12.6. *Projectized Organizational Structure Example*
 - 3.12.7. *Matrix Organizational Structure Example*
 - 3.12.8. *Project Interfaces*
 - 3.12.9. *Staffing Management Plan*
- 3.13. Communications Planning**
 - 3.13.1. *Stakeholder Analysis*
 - 3.13.2. *Communications Management Plan*
 - 3.13.3. *Communications Technology*
 - 3.13.4. *Communications Requirements*
 - 3.13.5. *Create a Communications Management Plan*
- 3.14. Risk Management Planning**
 - 3.14.1. *Planning Meetings*
 - 3.14.2. *Risk Management Plan*
 - 3.14.3. *Business Risk Versus Insurable Risk*
 - 3.14.4. *Effect-based Risk Classification*
 - 3.14.5. *Source-based Risk Classification*
 - 3.14.6. *Levels of Uncertainty*
 - 3.14.7. *unknown-unknown. Example*
 - 3.14.8. *Risk Analysis*
 - 3.14.9. *Risk Thresholds*
- 3.15. Risk Identification**
 - 3.15.1. *Risk Categories*
 - 3.15.2. *Information-gathering Techniques*
 - 3.15.3. *Interviewing Example*
 - 3.15.4. *Identify Project Risks and Triggers*
- 3.16. Qualitative Risk Analysis**
 - 3.16.1. *Risk Probability and Impact*
 - 3.16.2. *Data Precision Ranking*
 - 3.16.3. *Probability Scales*
 - 3.16.4. *Impact. Scales*
 - 3.16.5. *Probability/Impact Risk Rating Matrix*
 - 3.16.6. *Project Risk Ranking*
 - 3.16.7. *Perform Qualitative Risk Analysis*
- 3.17. Quantitative Risk Analysis**
 - 3.17.1. *Subjective Versus Objective Probability*
 - 3.17.2. *Statistical Analysis*
 - 3.17.3. *Probability Distributions*
 - 3.17.4. *Principles of Probability*
 - 3.17.5. *Interviewing*
 - 3.17.6. *Sensitivity Analysis*
 - 3.17.7. *Decision Tree Analysis*
- 3.18. Risk Response Planning**
 - 3.18.1. *Risk Avoidance*
 - 3.18.2. *Risk Transference*
 - 3.18.3. *Risk Sharing Example*
 - 3.18.4. *Risk Mitigation*
 - 3.18.5. *Risk Acceptance*
 - 3.18.6. *Contingency Plan*
 - 3.18.7. *Fallback Plan*
 - 3.18.8. *Contingency Reserve*
 - 3.18.9. *Develop a Risk Response Plan*
- 3.19. Plan Purchases and Acquisitions**
 - 3.19.1. *Specifications*
 - 3.19.2. *Make-or-Buy Analysis*
 - 3.19.3. *Contracts*
 - 3.19.4. *Prepare a Statement of Work*
- 3.20. Contracting Planning**
 - 3.20.1. *Procurement Documents*
 - 3.20.2. *Evaluation Criteria*
 - 3.20.3. *Prepare a Procurement Document*
- 3.21. Project Plan Development**
 - 3.21.1. *Organizational Policies*
 - 3.21.2. *Develop an Initial Project Plan*

Day 4

4. Executing

4.1. Project Plan Execution

- 4.1.1. *Work Authorization System*
- 4.1.2. *Status Review Meetings*
- 4.1.3. *Project Management Information System (PMIS)*
- 4.1.4. *Common PMIS Problems*
- 4.1.5. *Work Results*
- 4.1.6. *Execute the Project Plan*

4.2. Perform Quality Assurance

- 4.2.1. Quality Audits
- 4.2.2. Implement Quality Assurance
- 4.3. Acquire Project Team**
 - 4.3.1. Staff Acquisition Methods
 - 4.3.2. Motivation in Staff Acquisition
 - 4.3.3. Assign Project Staff
- 4.4. Develop Project Team**
 - 4.4.1. Stages of Team Development
 - 4.4.2. Forming
 - 4.4.3. Storming
 - 4.4.4. Norming
 - 4.4.5. Performing
 - 4.4.6. Team-building Activities
 - 4.4.7. Reward and Recognition System
 - 4.4.8. Collocation
 - 4.4.9. Training
 - 4.4.10. Conflict Management
 - 4.4.11. Develop the Project Team
- 4.5. Information Distribution**
 - 4.5.1. Distribute Project Information
- 4.6. Request Seller Responses**
 - 4.6.1. Proposals
 - 4.6.2. Receive Proposals, Quotes, or Bids
- 4.7. Select Sellers**
 - 4.7.1. Contract
 - 4.7.2. Weighting System
 - 4.7.3. contract Negotiation
 - 4.7.4. Contract
 - 4.7.5. Select a Seller
 - 4.7.6. Contract Administration
 - 4.7.7. Role of the Contract Administrator
 - 4.7.8. Legal Issues
 - 4.7.9. Warranties
 - 4.7.10. Waivers
 - 4.7.11. Contract Breaches
 - 4.7.12. Contract Change Requests
 - 4.7.13. Production Surveillance
 - 4.7.14. Administer a Contract

- 5.2.3. Review Deliverables and Work Results
- 5.3. Scope Control**
 - 5.3.1. Control Project Scope Changes
- 5.4. Schedule Control**
- 5.5. Earned Value Management (EVM)**
 - 5.5.1. Schedule Performance Measurement
 - 5.5.2. Schedule Control Chart
 - 5.5.3. Schedule Variance
 - 5.5.4. Planned Value (PV)
 - 5.5.5. Earned Value (EV)
 - 5.5.6. Schedule Performance Index (SPI)
 - 5.5.7. Control the Project Schedule
 - 5.5.8. Controlling the Project Schedule Example
- 5.6. Cost Control**
 - 5.6.1. Cost Variance (CV)
 - 5.6.2. Cost Performance Index (CPI)
 - 5.6.3. Estimate at Completion (EAC)
 - 5.6.4. Control Project Costs
- 5.7. Quality Control**
 - 5.7.1. Causes of Variance
 - 5.7.2. Special and Random Causes of Variance Example
 - 5.7.3. Tolerances
 - 5.7.4. Control Charts
 - 5.7.5. Seven Run Rule
 - 5.7.6. Pareto Diagrams
 - 5.7.7. 80/20 Rule
 - 5.7.8. Statistical and Attribute Sampling Data
 - 5.7.9. Variable Sampling Data
 - 5.7.10. Determining Sample Size
- 5.8. Manage Project Team**
- 5.9. Manage Stakeholders**
- 5.10. Performance Reporting**
 - 5.10.1. Report Project Performance
- 5.11. Risk Monitoring and Control**
 - 5.11.1. Project Risk Response Audit
 - 5.11.2. Monitor and Control Project Risk

Day 5

5. Controlling

- 5.1. Integrated Change Control**
 - 5.1.1. Causes of Project Changes
 - 5.1.2. Inaccurate Initial Estimates
 - 5.1.3. Specification Changes
 - 5.1.4. Change Control System
 - 5.1.5. Configuration Management
 - 5.1.6. Manage Changes to Performance Baselines
- 5.2. Scope Verification**
 - 5.2.1. Inspection
 - 5.2.2. Formal Acceptance

6. Closing

- 6.1. Project Closure**
 - 6.1.1. Obtain Formal Acceptance
- 6.2. Contract Closure**
 - 6.2.1. Procurement Audits
 - 6.2.2. Closing Out a Contract