# Project Management Concepts and Strategies

**Contact Hours: 24**

## Course Description

This series provides a detailed examination of project management concepts and strategies. It discusses the seven components of a management system and the five phases of the project life cycle, and looks at factors that affect cost and quality. The project manager`s role is explored in detail, and strategies for defining the project are examined. Tasks such as developing the Work Breakdown Structure, estimating and scheduling resources, scheduling computations, and tracking project activities are discussed. The close-out phase of a project is also covered. Other topics include formalizing project management standards, developing a project team, and strategies for becoming a more effective project manager.

## Outcome

After completing this course, students will be able to:

**Project Management Overview**

- Define the terms project and project management
- Explain the seven components of a management system
- List and describe the five phases of the project life cycle
- Describe how the time devoted to a project affects its cost
- Explain what causes rework on projects
- Describe the factors that contribute to the cost of quality
- Explain how to tailor project management to small projects
- Describe ways to gain your organization`s support of project management

**Understanding the Project Manager`s Role**

- Describe five key traits that a project manager should have
- List the duties and responsibilities of a project manager
- Explain why a project manager should have good people skills
- Explain the importance of leadership
- List the guidelines for running effective meetings
- Explain why a project manager should not assume multiple roles

**Defining the Problem**

- Explain reasons why projects fail
- Explain the importance of having stakeholders participate in defining the problem
- Explain the elements of the Definition Phase
- Describe closed-ended problems and explain the approach to solving them
- Describe open-ended problems and explain the approach to solving them

- Define what a project charter is and explain why it is important

**Determining the Strategy**

- Define project strategy and explain its importance
- List the steps in determining a project`s strategy
- Explain the approach for developing a list of strategies
- Describe the approach for ranking a list of strategies
- Define risk as it relates to project management
- Explain three ways to manage risk
- Explain how to handle resistance from people when developing the project strategy

**Developing the Work Breakdown Structure**

- Define the work breakdown structure and explain its purpose during the implementation phase
- List the components of the work breakdown structure
- List the steps for developing the work breakdown structure
- List the guidelines to follow when developing the work breakdown structure
- Define the network diagram and explain its purpose during the implementation phases
- List the steps in developing a network diagram
- Explain the AOA and AON methods for network diagramming

**Estimating and Scheduling Resources**

- Define estimating
- List the questions you need to answer to begin estimating a project
- Explain the importance of historical data
- List the factors to consider when estimating cost
- List the factors to consider when estimating resources
- Explain the advantages of scheduling methods such as PERT and CPM
- Explain how to take advantage of project management software

**Understanding Scheduling Computations**

- List the variables that affect the project schedule as well as the rules for computing project time
- Define forward pass computations
- Define backward pass computations
- Explain the relationship of float to critical path
- Explain how network calculations are performed
- Describe constrained end date scheduling
- Explain how to reduce activity durations
- Describe the use of bar charts in project scheduling
- Demonstrate how to determine the critical path of project

**Tracking Project Activities**

- List for variables that must be controlled and monitored for a project
- List two guidelines for controlling a project
- Define the BWCP graph analysis technique for tracking projects
- Demonstrate ability to use graphs for tracking projects
- List the advantages of spreadsheet analysis
- List the disadvantages of reporting schedule only

- List three kinds of project reviews
- Describe what to do when a project is off track

**Closing Out the Project**

- Explain ways that a project can end
- List the tasks for closing out a project
- Explain why it is important to verify and approve project deliverables
- Explain how to handle resources at the end of a project
- List what you need to consider when delivering a finished product
- List the components of the project final report

**Formalizing Project Management Standards**

- Define the importance of having a project management methodology and list what a methodology should contain
- List the types of roles and responsibilities that should be specified in a formalized project management standard
- List the stakeholders who must approve each item in the project cycle
- List six pieces of information that a Process Review Report should contain
- Explain why developing a project methodology is important for ISO certification

**Developing Project Teams**

- Define a team
- List ways project teams differ from other types of teams
- Explain the importance of building teams
- List three ways to foster communication on a team
- List and explain four focuses for dealing with issues
- List the team member roles and responsibilities
- Explain the two components that affect every team decision
- List the five levels of psychologist Abraham Maslow`s hierarchy of human needs and explain why this theory is important for good team building
- Explain different styles of thinking that people may demonstrate on a team

**Ensuring Your Own Effectiveness**

- Develop a list of personal values and rank them by priority
- Distinguish between effectiveness and efficiency and explain why each is important
- Use a prioritized list of values to define life goals
- Understand how the 80/20 Principle applies to personal effectiveness
- List guidelines for speaking and writing effectively
- List the requirements for project management certification

# Assessment

Students may master the course/s by achieving a percentage at or above 70% for each individual lesson, through their scoring results of the course questions, the skill assessment, or a combination of both.

# Outline

Course Details

## Project Management Overview

- Definition of project and project management
- The project management system
- The project life cycle
- Project constraints
- The costs of quality
- Managing small projects
- Gaining organizational support

## Understanding the Project Manager's Role

- Traits of a project manager
- Responsibilities and duties
- The need for good people skills
- The importance of leadership
- Effective meeting guidelines
- Problems in assuming multiple roles

## Defining the Problem

- The Importance of the Definition Phase
- Stakeholders
- Aspects of the Definition Phase
- Solving Closed-Ended Problems
- Defining Open-Ended Problems
- The Project Charter

## Determining the Strategy

- Definition of Strategy
- Steps to Determine Strategy
- Develop the Strategies List
- Rank the Strategies List
- Identify Risk
- Contingency Planning
- People Problems

## Developing the Work Breakdown Structure

- WBS basics
- Identifying tasks
- WBS procedures
- WBS guidelines
- Network diagram basics
- Network diagram procedures

**Estimating and Scheduling Resources**

- Basics of Scheduling
- The Definition of Estimating
- Assumptions When Estimating
- Estimating Methods
- Resource Estimates
- Basics of Budgeting
- Approval of Work Plan
- Project Management Software

**Understanding Scheduling Computations**

- Basics of scheduling computations
- Forward pass computations
- Backward pass computations
- Activity maximum float
- Network calculations
- Constrained end date scheduling
- Reducing activity durations
- Use of the bar chart

**Tracking Project Activities**

- Basics of Control
- Guidelines for Controlling a Project
- Approaches to Monitoring
- Graph Analysis
- Spreadsheet Analysis
- Status Reporting
- Review Meetings
- Accommodating Changes Deviations

**Closing Out the Project**

- How Projects End
- Closing a Project
- Verification and Approval of Results
- Reallocation of Resources
- Delivery of Results
- Final Report

**Formalizing Project Management Standards**

- Developing a project methodology
- Roles and responsibilities
- Deliverables and approvals
- Process review
- ISO requirements

**Developing Project Teams**

- Definition of Team
- How Project Teams Are Different
- Team Building
- Communication
- Issues in Team Building
- Team Member Roles and Responsibilities
- Teams and Decision Making
- An Individual's Needs
- Differences in Thinking Styles

**Ensuring Your Own Effectiveness**

- The values approach
- Life planning
- Time management guidelines
- Speaking and writing skills
- Certification

## US$ Cost: US480.00

## CEU Credits: 2.4

## Certification: Clemson University/Chatanooga State College

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