



1 COURSE OUTLINE

Course Name:	Agile Project Management: Understanding and implementing agile principles and practices
Contact Hours:	15
Pre-requisites:	Completion of a training programme in project management or project management experience.

1.1 Abstract

Over the last few years, Agile Project Management has been gaining popularity with project management professionals globally. It is a flexible and adaptive approach to project management that minimizes paperwork and encourages project managers to plan projects in short cycles instead of longer ones. It enables project teams to work together more effectively on evolving customer requirements, and it emphasizes the importance of human interaction throughout the project management cycle. When compared to traditional project management approaches, Agile Project Management facilitates the delivery of value to customers earlier and faster, leading to improved customer satisfaction and increased business success. Today, Agile Project Management is being rapidly adopted across all industries, by a variety of organizations that need to be flexible and responsive as the pace of change continues to accelerate in business.

1.2 Course Overview

This course is intended to introduce participants to Agile principles, practices and approaches, help them to become more Agile in mindset and behaviour, and facilitate the implementation of Agile Project Management practices at their organizations. Course participants will learn about Agile Project Management and the Agile environment, and be exposed to some of the most popular Agile methodologies (e.g. Scrum, Extreme Programming, Lean Development and Kanban). Course participants will also learn the basics of how to plan and execute Agile Projects using Scrum, one of the leading Agile Project Management Methodologies in use today.

1.3 Target Audience

- Persons who have an interest in Agile Project Management and are desirous of developing an in-depth understanding of Agile principles and practices.
- Project management professionals who work on traditionally managed projects and are desirous of understanding and exploring Agile Project Management and its different practices.
- Project management professionals who are desirous of implementing key Agile principles and practices in their organizations, but lack Agile Project Management understanding and experience.



1.4 Learning Outcomes (LOs)

Upon successful completion of this course, participants will be able to:

- LO1: Explain key Agile terms and concepts, and the purpose behind common Agile Project Management practices.
- LO2: Describe important organizational components in the creation of an Agile Environment.
- LO3: Identify leading Agile Methodologies (Scrum, Extreme Programming, Lean Development and Kanban) and explain their key characteristics.
- LO4: Apply Scrum principles and practices to plan an Agile project.
- LO5: Apply Scrum principles and practices to execute an Agile project.
- LO6: Manage the triple constraints (Scope, Time and Cost) in Agile projects

1.5 Topics Covered

1. Introducing Agile Project Management

- The need for agility in project management
- Agile values, principles and mindset
- Leading Agile approaches and methodologies (Scrum, Kanban, Scrumban, Lean Development, Extreme Programming, Crystal)
- Traditional/predictive project life cycles vs change-driven/adaptive project life cycles
- Factors influencing choice of project life cycle

2. Creating an Agile Environment

- Important organizational culture components
- Servant leadership and the role of the Project Manager on Agile projects
- Agile project team member philosophy, roles and responsibilities
- Attributes of successful Agile Teams
- Agile project team workspaces and physical environment
- Communication tools and *Information Radiators* favoured by Agile teams



3. Understanding Leading Agile Methodologies

Overview of the following leading agile methodologies and their key characteristics:

- Scrum
- Extreme Programming
- Lean Development
- Kanban

4. Planning an Agile Project using Scrum

- Introducing Agile project planning
- Defining the Product Vision and Roadmap in Scrum
 - Defining the Product Vision
 - Creating a Product Roadmap
 - Creating the Product Backlog
- Refining Requirements and Estimates in Scrum
 - Creating User Stories
 - Estimating Story Points/Effort (using *Planning Poker* and *T-Shirt Sizing* techniques)
 - Prioritizing User Stories (using *Kano Model*, *MoSCoW Analysis*, *Paired Comparison Analysis*, *100 Points Method* and *Dot Voting* techniques)
- Performing Release Planning in Scrum
- Performing Sprint Planning in Scrum, utilizing the Sprint Backlog

5. Executing an Agile Project using Scrum

- Planning for the day ahead with the **Daily Scrum**
- Tracking Agile project progress and measuring results (incorporating techniques that utilize the *Sprint Backlog*, *Task boards*, *Burndown* and *Burnup Charts*, and *Velocity*)
- Demonstrating work done to stakeholders in the **Sprint Review**, and collecting stakeholder feedback
- Reviewing work done by the project team in the **Sprint Retrospective**, and make adjustments going forward



6. Managing the triple constraints in Agile Projects

- Managing Scope
 - Key considerations for Agile Scope Management
 - Managing Agile Scope
- Managing Time/ Schedule
 - Key considerations for Agile Time Management
 - Managing Agile Schedules
- Managing Cost
 - Key considerations for Agile Cost Management
 - Managing Agile Budgets

1.5 Sample Learning Plan

This course may be delivered in either online or face-to-face delivery mode. This sample learning plan has been included as guidance. It demonstrates one way of planning the delivery of this course. Changes may be made as deemed necessary by the lecturer.

Session #	Learning Outcome(s)	Topic	Hours
1	LO1	1. Introducing Agile Project Management	3
2	LO2 LO3	2. Creating an Agile Environment 3. Understanding Leading Agile Methodologies	3
3	LO4	4. Planning an Agile Project using Scrum (Pt 1)	3
4	LO4 LO5	4. Planning an Agile Project using Scrum (Pt 2) 5. Executing an Agile Project using Scrum	3
5	LO6	6. Managing the triple constraints in Agile Projects	3
Total Contact Hours:			15