# BA15

Planning & Managing Agile Projects

**PMI-ACP®**

projex GROUP

# COURSE BACKGROUND

## COURSE LENGTH:

3 days (21 PDUs)

## COURSE LEVEL:

Basic/Intermediate

## COURSE DESCRIPTION:

This 3-day course aims at introducing its attendees to the core values, principles, and practices of Agile. This course is a more elaborate version of the Certified Scrum Master training as it discusses how to plan and manage Agile practices, not only those in Scrum. This course goes into great depth about all the roles and responsibilities on the team and not just the ScrumMaster and Product Owner roles.

The use of agile as an approach to managing projects has dramatically increased over the last several years. Gartner predicts that by the end of 2012, agile development methods will be used on 80% of all software development projects. PMI's research has shown that the use of agile has tripled from December 2008 to May 2012. Therefore, PMI® has developed a new certificate called the Agile Certified Practitioner (PMI-ACP)®. The (PMI-ACP)® is positioned to recognize and validate knowledge of this important approach.

This course is aligned with the new PMI® Agile Certified Practitioner (PMI-ACP)® credential that is becoming a worldwide accepted standard for best practices for Agile Project Management like the PMBOK® Guide and PMP® recognition is for Project Management.

## WHO SHOULD ATTEND:

It is appropriate for Managers, Executives, Project Managers, Business Analysts, Business and IT stakeholders working with analysts, Quality and process engineers, technicians, managers; supervisors, software team leads, specialists in software development processes and quality assurance, and process operators.

## PREREQUISITES:

No prerequisites - This course is suitable for both novice and experienced professionals who need to manage and implement a project. It is recommended that participants have a basic understanding of project management and business processes and business analysis. Those interested in the (PMI-ACP)® certification must have at least 2000 hours Agile project experience and preferably be a certified PMP® to qualify for the new exam.

## COURSE OVERVIEW:

Many of today's Project Management and Business Analyst Professionals are finding themselves leading, managing and conducting analysis while on Agile development teams. We have found that many of the tools and techniques applied during a traditional project management approach no longer work as

effectively, or at all. In order to do more than survive in this iterative development environment, today's Project Managers and Business Analysts must employ additional project management and business analysis tools and techniques to effectively lead their teams and deliver projects successfully.

This course explores how your projects can easily and successfully make the transition to an effective Agile environment. Agile is an incremental, iterative framework for project management and software development - where requirements and solutions evolve through collaboration between self-organizing cross-functional teams. This disciplined project management process involves:

- A leadership philosophy that encourages teamwork, self-organization and accountability
- A set of engineering best practices to allow for rapid delivery of high-quality software
- A business approach that aligns development with customer needs and company goals

Using a case-study/project of their choice, participants learn how to plan and manage an Agile framework. Your role in an agile project will look much different as you form and coach a self-directed team, facilitate continuous collaboration with your clients, manage and deliver business value to your clients early and regularly throughout the project.

## LEARNING OBJECTIVES:

- Plan, manage and close requirements for a project in reduced time using Agile practices
- Minimize project uncertainty and risk by applying Agile principles
- Ensure your project delivers required functionality and adds value to the business
- Create an environment of self-management for your team so that they will be able to continuously align the delivered product with desired business needs, easily **adapting** to changing requirements throughout the process
- Learn how to apply Agile by measuring and evaluating status based on the undeniable truth of working, testing software, creating a more accurate **visibility** into the actual progress of projects

# COURSE TOPICS

## SECTION 1: INTRODUCTION

- Why Agile?

  **Exercise 1a: Waterfall-Lean-Agile Simulation**

- History & Mindset: Understand how the agile approach arose.
- The Agile Lifecycle
- Introducing Agile to the organization
- Roles and Responsibilities on an Agile project team. Understand the purpose, the concepts, the theory, and some applications around the importance of people as individuals providing value through working in teams.
- Establishing core hours - How will the team work during a day?
- How to build end-to-end systems in early iterations

  **Exercise 1b: How to build end-to-end systems in early iterations**

- Planning and Managing Business Analysis Communication and Performance
- Agile and CMMI

  **Exercise 1c: Case Study Project**

## SECTION 2: VALUE DRIVEN DELIVERY – IDENTIFY STAKEHOLDERS

- Value-Driven Development: Understand why agile development focuses so heavily on working products, its more general casting as "value-driven" development, with incremental, iterative and risk-driven approaches. Themes, theory and applications.

  **Exercise 2a: Identify the "Product Owner"**

- Identify Project Success Criteria
- Establish your Agile team using RACI

  **Exercise 2b: Build the Scrum Team**

## SECTION 3: STAKEHOLDER ENGAGEMENT – ENVISION THE PRODUCT

- Setting expectations with stakeholders. Understand the value, the concepts, the theory, and some applications for working with stakeholders, buyers and users to get an optimal result.
- Envision the Product vision with your product owner and other stakeholders

  **Exercise 3a: Envision the Product – Define Objectives and Goals**

- Document Business Functionality

  **Exercise 3b: Brainstorming Business Functionality**

- Document Technical Functionality

  **Exercise 3c: Brainstorming Technical Functionality**

## SECTION 4: TOOLS AND TECHNIQUES – BUILDING THE SCRUM TASK BOARD

- Communications
- Planning, Monitoring and Adapting

  **Exercise 4a: Discussion – Tools and Techniques for Scrum**
- Scrum Task Board

  **Exercise 4b: Create a Scrum Task board**
- Agile Estimating
- Agile Analysis and Design
- Burndown Chart
- Team Velocity
- Soft Skills Negotiation

## SECTION 5: INITIATE AN AGILE PROJECT – PLANNING RELEASES

- Envision the Product and Project outcomes

  **Exercise 5a: Define the Project Vision**
- Project Chartering (Project Planning)
- Assemble the Agile project team – what are their responsibilities?
- Compile the Product Backlog (Coarse-Grain Requirements)
- Discuss how to Plan Sprints and Releases

  **Exercise 5b: Create a Release Plan**
- Establish the Project "time-box"

  **Exercise 5c: Establish the Project Time-Box**
- Embrace the High-Level (Coarse-Grain) Plan
- Managing different types of Personas on an Agile Project
- Creating and Managing Team Rooms
- Identifying and managing "Information Radiators"
- Planning in Agile Projects – Common practices that work
- Determine how the team will tracking and monitoring activities

## SECTION 6: ESTIMATING AD PRIORITIZING EFFORT

- Planning Releases. Understand the value, the concepts, the theory and some applications for learning and adapting at all levels and on all topics (the product, the process, the team, and the organization).
- Establishing decision and acceptance criteria for user stories
- Planning Poker

  **Exercise 6b: Estimate Effort (Course-Grain)**
- Prioritize themes and releases
- Prioritize user stories

  **Exercise 6c: Prioritize User Stories**

- Estimating team velocity
- Preparing for change – Is the organization ready?

## SECTION 7: PLAN THE ITERATION (SPRINT)

- Sprint Zero activities
- Elements of a successful Sprint Planning meeting

  **Exercise 7a: Discussion – Sprint "Zero" Activities**
- Create a Sprint Backlog
- How to create a task board

  **Exercise 7b: Review the Sprint Plan**
- Create a Sprint plan – Establishing Sprint success metrics

  **Exercise 7c: Adapting to a Chang-Driven Project Plan that Works**
- Define the vision and Iteration Requirements
- Estimating the level of effort (LOE) with the team
- Creating user Stories for the Product Backlog – Guidelines to consider
- The art of slicing user stories

  **Exercise 7d: Confirm the Estimated Effort (Fine Grain)**
- Managing the Solution Scope and Requirements using 2-4 week Sprints

  **Exercise 7e: Finalize Sprint Goal and Backlog**
- Adapting a change-driven (Agile) Project plan that works – what are the key differences from traditional (waterfall) project plans?
- Finalize the Iteration Plan and how the team will operate

## SECTION 8: RUNNING THE SPRINT - FROM PLANNING TO REVIEW AND RETROSPECTIVE

- Managing your Scrums and setting expectations with your team

  **Exercise 8a: Hold a Daily Scrum and Update the Task Board**
- Using Burndown charts to track progress

  **Exercise 8b: Gain Customer Acceptance**
- Manage changes during the Sprint – What questions to ask
- Prepare for the Sprint Review

  **Exercise 8c: Review of Roles - Quiz**
- Obtain Customer Acceptance of the Product Increment
- Hold a Sprint Retrospective - What is working and what needs to be improved upon during the Sprints

  **Exercise 8d: Understand the Project Status**
- Update the product backlog - Rework the High-Level (Coarse-Grain) Plan
- Plan and Execute the next Sprint

  **Exercise 8e: Change the Product Backlog**
- Create an environment for continuous improvement – Product, Process and People

## SECTION 9: BOOSTING THE TEAM PERFORMANCE

- Team Formation – What to look for
- Team Empowerment
- Team Collaboration
- Team Commitment
- Coaching the Team – How to keep them motivated and moving forward towards the desired outcome

  **Exercise 9a: Coach the Scrum Team**
- Assist the team to detect and resolve problems
- Ensuring the integrity of Scrum Practices

  **Exercise 9b: Ensure the Integrity of Scrum Practices**
- Facilitating communication with stakeholders

  **Exercise 9c: Facilitate Communication**
- Remove impediments to Progress

  **Exercise 9d: Remove Impediments to Progress**
- Verifying and validating using an Agile approach

  **Exercise 9e: Create Test Scenarios from your User Stories**
- What does sign-off really mean?

  **Exercise 9f: Getting Sign-off**

## SECTION 10: ADDITIONAL INFORMATION

- Useful books and links on Agile