

Google Project Management Certificate

Course 5 - Agile Project Management Study Notes

Prepared for Coursera Google Project Management Professional Certificate

Generated on July 24, 2025

Contents

1	Module 1: Introduction to Agile	2
1.1	Key Concepts	2
1.2	Study Tips	2
2	Module 2: Scrum in Practice	3
2.1	Key Concepts	3
2.2	Study Tips	4
3	Module 3: Implementing Agile	4
3.1	Key Concepts	4
3.2	Study Tips	5
4	General Study Tips for Course 5	5
5	Additional Notes	6

1 Module 1: Introduction to Agile

1.1 Key Concepts

- **Agile Philosophy:**
 - Emphasizes flexibility, collaboration, and iterative delivery to adapt to changing requirements.
 - Guided by the Agile Manifesto: prioritizes individuals and interactions, working products, customer collaboration, and responding to change.
- **Agile vs. Traditional (Waterfall):**
 - Agile uses iterative cycles (sprints) and frequent feedback, unlike Waterfall's linear, sequential approach.
 - Agile suits projects with evolving requirements (e.g., software development); Waterfall suits fixed requirements (e.g., construction).
- **Scrum Framework:**
 - A popular Agile methodology with defined roles (Product Owner, Scrum Master, Team), events (sprints, daily standups), and artifacts (Product Backlog, Sprint Backlog, Increment).
 - Sprints are time-boxed iterations (typically 2-4 weeks) delivering usable increments.
- **Agile Principles:**
 - Transparency: Open communication and visibility of progress.
 - Inspection: Regular reviews to ensure quality and alignment.
 - Adaptation: Adjust processes based on feedback and lessons learned.

1.2 Study Tips

- **Understand Agile Principles:**
 - Memorize the four values of the Agile Manifesto and create a summary in your own words.
 - Example: “Value working software over comprehensive documentation.”
- **Compare Methodologies:**
 - Create a comparison table for Agile and Waterfall, noting their advantages, disadvantages, and suitable project types.
 - Example:

Methodology	Advantages	Disadvantages	Best For
Agile	Flexible, collaborative	Needs skilled teams	Software, creative projects
Waterfall	Structured, predictable	Rigid, less adaptable	Construction, manufacturing

- **Explore Scrum:**
 - Diagram the Scrum framework, labeling roles, events, and artifacts.
 - Review course examples (e.g., Plant Pals) to understand Scrum in practice.
- **Engage with Forums:**
 - Discuss Agile vs. Waterfall in Coursera forums to clarify differences and applications.

2 Module 2: Scrum in Practice

2.1 Key Concepts

- **Scrum Roles:**
 - *Product Owner*: Defines product vision, prioritizes Product Backlog, and represents stakeholders.
 - *Scrum Master*: Facilitates Scrum processes, removes impediments, and coaches the team.
 - *Team*: Cross-functional group delivering the product increment.
- **Scrum Events:**
 - *Sprint Planning*: Team plans work for the upcoming sprint, selecting items from the Product Backlog.
 - *Daily Standups*: 15-minute meetings to discuss progress, plans, and blockers.
 - *Sprint Review*: Stakeholders review the increment and provide feedback.
 - *Sprint Retrospective*: Team reflects on the sprint to improve processes.
- **Scrum Artifacts:**
 - *Product Backlog*: Prioritized list of all desired features and tasks, managed by the Product Owner.
 - *Sprint Backlog*: Subset of Product Backlog items selected for a sprint.
 - *Increment*: Usable product delivered at the end of a sprint.
- **Scrum Values:**
 - Commitment, courage, focus, openness, and respect guide team behavior and collaboration.

2.2 Study Tips

- **Practice Scrum Roles:**
 - Role-play a Scrum team meeting, assigning roles (e.g., Product Owner, Scrum Master) and discussing responsibilities.
 - Example: As Product Owner, prioritize three backlog items for a sprint.
- **Simulate Scrum Events:**
 - Create a sprint plan for a hypothetical project (e.g., app development) with 35 backlog items.
 - Practice facilitating a mock daily standup, addressing the three questions: What did I do? What will I do? Any blockers?
- **Manage a Product Backlog:**
 - Draft a Product Backlog in Google Sheets for a sample project, prioritizing tasks using the MoSCoW method (Must have, Should have, Could have, Wont have).
 - Review and refine priorities based on stakeholder feedback.
- **Review Retrospectives:**
 - Conduct a mock retrospective, listing what went well, what didnt, and action items for improvement.
 - Use course examples to align with Scrum best practices.

3 Module 3: Implementing Agile

3.1 Key Concepts

- **Value-Driven Delivery:**
 - Prioritize tasks based on business value to deliver maximum impact early.
 - Use techniques like MoSCoW prioritization or value scoring to rank backlog items.
- **Agile Implementation Strategies:**
 - Transition teams to Agile by training on principles, roles, and ceremonies.
 - Start with pilot projects to test Agile processes before full adoption.
- **Agile Tools:**
 - Use tools like Asana, Jira, or Trello to manage Product Backlogs, Sprint Backlogs, and task tracking.
 - Kanban boards visualize workflow and track progress.
- **Coaching Agile Teams:**

- Guide teams to embrace Agile values, foster collaboration, and adapt to iterative processes.
- Address resistance by highlighting benefits like flexibility and stakeholder engagement.

3.2 Study Tips

- **Practice Prioritization:**
 - Create a Product Backlog for a sample project and prioritize tasks using the MoSCoW method.
 - Example: Must have = Core app functionality; Could have = Optional features.
- **Set Up Agile Tools:**
 - Create a Kanban board in Trello or Asana for a hypothetical project, organizing tasks into columns (e.g., To Do, In Progress, Done).
 - Practice moving tasks to simulate sprint progress.
- **Simulate Agile Transition:**
 - Develop a plan to transition a team to Agile, including training sessions and a pilot project.
 - Role-play addressing team resistance to Agile adoption.
- **Review Case Studies:**
 - Analyze course case studies (e.g., Plant Pals) to understand Agile implementation in real-world scenarios.

4 General Study Tips for Course 5

- **Organize Notes:**
 - Create a dedicated folder in Google Docs or Notion for Course 5 notes, with sub-sections for each module.
 - Maintain a glossary of key terms (e.g., Scrum, Product Backlog, MoSCoW) for quick reference.
- **Engage Actively:**
 - Complete all quizzes, discussion prompts, and peer-reviewed assignments to reinforce learning.
 - Participate in Coursera forums to discuss Agile principles and Scrum practices with peers.
- **Practice Application:**
 - Apply Agile concepts to a personal project (e.g., developing a personal website) by creating a Product Backlog and running a mock sprint.

- Simulate a daily standup and retrospective for this project.
- **Time Management:**
 - Allocate 23 hours per module, aiming to complete Course 5 in 34 weeks.
 - Set deadlines for assignments and review sessions to stay on track.
- **Tool Familiarity:**
 - Experiment with Jira, Trello, or Asana to manage Agile workflows.
 - Practice creating and updating Kanban boards and backlogs with hypothetical project data.

5 Additional Notes

- **Course Context:** Course 5 focuses on Agile methodologies, emphasizing Scrum and practical implementation. It includes videos, readings, quizzes, and hands-on assignments (e.g., Plant Pals case study).
- **Certification Benefits:** Contributes to the Google Project Management Professional Certificate, accredited by PMI, with credits toward CAPM certification (over 100 hours total for the program).
- **Resources:** Use Coursera-provided templates (e.g., Product Backlog, sprint plan) and explore tools like Jira and Trello for practical experience.
- **Program Cost:** \$49/month after a 7-day free trial; financial aid is available.
- **AI Integration:** Course materials may reference AI tools for tasks like backlog prioritization or sprint planning.