
Introduction to Scrum



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Online Demo Lesson
April 24, 2025

ACM CS Curricular Guidelines

An Introduction to Scrum best fits within the Software Engineering Teamwork Knowledge Unit

Part of CS Core (2+3 hours) and/or KA Core (2 hours) Topics

One outcome will involve articulating how to use Scrum as a best team communication practice

Another outcome will involve articulating how to use the Scrum process to manage conflict and the problem-solving process through the daily standups, review, and retrospective

A final outcome will involve articulating how to engage with stakeholders to create and execute a plan for the upcoming sprint.

ABET Learning Outcomes Covered

- CS 5 Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline
- SE 3 An ability to communicate effectively with a range of audiences;
- SE 5 An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives;
- SE 6 An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions;



Agenda

- Introduction
- Core Concepts
- The Three Pillars
- The Five Values
- The Team
- Components of a Sprint
- Key Benefits
- Key Takeaways



Introduction

- Lightweight, powerful, agile framework
- Helps teams deliver creative and viable solutions
- Delivers value incrementally
- Offers adaptability based on observation, experimentation and feedback





Core Concepts

- A framework, not an instruction manual
- Iterative process w/ sprints
- Use empirical controls (e.g., observation and experiments)
- Requires everyone to learn from their experiences and adapt
- Requires trust

The three pillars



TRANSPARENCY



INSPECTION



ADAPTATION

The five values

Courage

Focus

Commitment

Respect

Openness



The Team

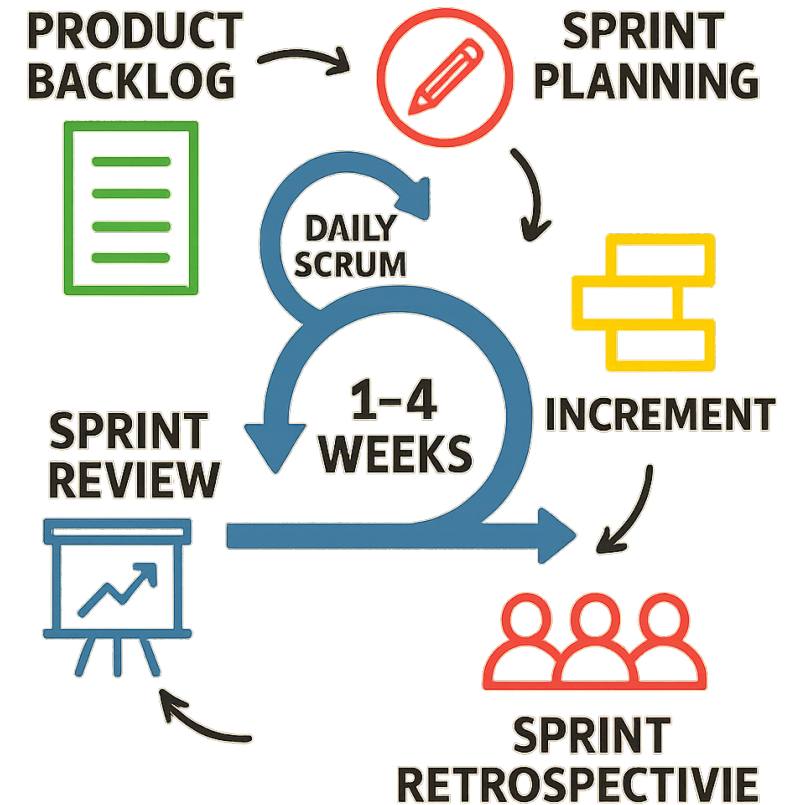
The team consists of:

- Scrum Master
- Product Owner
- Developers

Components of a Sprint

- Stakeholders start with a product backlog
- Stakeholders generate a sprint backlog from the product backlog
- Stakeholders develop a plan to turn the backlog into a working, deliverable increment
- Stakeholders participate in five events
- Stakeholders produce three artifacts
- Stakeholders hold daily scrums during the sprint
- Stakeholders hold a review after the increment is delivered
- Stakeholders hold a retrospective after the review

AGILE BASED SCRUM PROCESS





Key Benefits

- Increased flexibility and adaptability to change.
- Improved team collaboration and self-organization.
- Faster delivery of value to customers.
- Enhanced transparency and visibility of progress.

Key Takeaways

