BCS EXIN Foundation Certificate in Agile Scrum Syllabus

V2.2 May 2020

This professional certification is not regulated by the following United Kingdom Regulators - Ofqual, Qualifications in Wales, CCEA or SQA

Change History

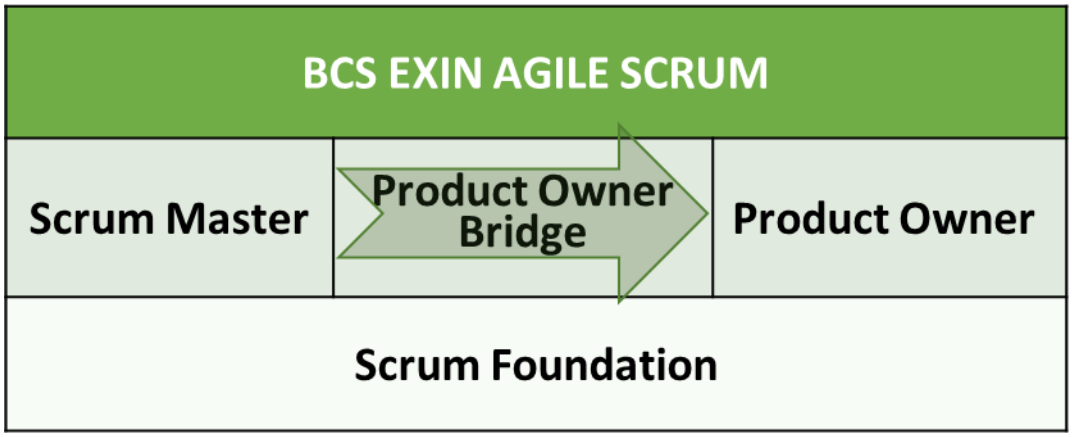
This log provides a single point of reference, where a summary of any changes is recorded, to include the date of the amendment and a summary of the changes made.

Version Number	Changes Made
Version 2.2 May 2020	Update to the Training Criteria.
Version 2.1 March 2020	Basic Concepts List: Development Team added and Test-driven software development changed to Test-driven development.
Version 2.0 Nov 2019	Amendment to wording of topic 1, update of list of basic concepts and general tidy up.
Version 1.1 Oct 2019	Typographical correction to Syllabus Weighting table.
Version 1.0 July 2019	Finalised.
Version 0.1 March 2019	BCS Formatted syllabus created.

Contents

Introduction

The BCS EXIN Foundation certificate in Agile Scrum is part of the Agile Scrum qualification program.



Summary

BCS EXIN Foundation Certificate in Agile Scrum shows a candidate's knowledge of Agile principles and the Scrum framework. Agile and Scrum are about working together to successfully reach the goal. Agile principles are popular in software development and are increasingly being used in other areas. Scrum practices include establishing cross-functional and self-managing teams, producing a working increment of software at the end of each iteration or Sprint.

Scope
The EXIN Agile Scrum Foundation certification validates a candidate's knowledge on:

- the Agile way of thinking;
- Scrum practices;
- Scrum planning and estimation;
- monitoring Scrum projects;
- advanced Scrum projects.

Target Audience

The Agile way of thinking is best known in the field of software development, but the principles are increasingly being applied in other types of projects. Scrum is the most used Agile methodology and is suitable for all professionals looking to keep their knowledge up to date with the latest developments in the fields of IT and Project Management, particularly those leading or participating in projects. In particular, the certification is suitable for professionals working in the areas of: Project Management; Software development; IT Service Management; and Business Management. This certification is highly recommended before starting a Scrum project

Levels of Knowledge / SFIA Levels

This syllabus will provide candidates with the levels of difficulty highlighted within the following table, also enabling them to develop the skills to operate at the highlighted level of responsibility (as defined within the SFIA framework) within their workplace. The levels of knowledge and SFIA levels are further explained on the website.

Level	Levels of Knowledge	Levels of Skill and Responsibility (SFIA)
7		Set strategy, inspire and mobilise
6	Evaluate	Initiate and influence
5	Synthesise	Ensure and advise
4	Analyse	Enable
3	Apply	Apply
2	Understand	Assist
1	Remember	Follow

Learning Outcomes

Candidates should be able to demonstrate the ability to understand and explain Agile concepts in the following areas:

1. The Agile way of thinking;
2. Scrum practices;
3. Scrum Planning and Estimation;
4. Monitoring Scrum Projects;
5. Advanced Scrum Concepts.

Course Format and Duration

Candidates can choose to study for this certificate from one of two ways: by either attending a training course provided by a BCS Accredited Training Organisation, or by self-study.

BCS recommends that for full coverage of the syllabus to be achieved, training courses leading to the certificate should normally run for a minimum 14 hours. This number includes group assignments, exam preparation, and short breaks. Not included are: homework, logistics for exam preparation and lunch breaks.

Candidates should spend about 60 hours on self-study, depending on existing knowledge.

Examination Format and Duration

Type	40 Multiple choice questions
Duration	60 Minutes
Supervised	Yes
Open Book	No
Pass Mark	65%
Calculators	No
Delivery	Digital & Paper

Eligibility for the Examination

There are no specific pre-requisites for the entry to the examination, although knowledge of Scrum terminology will be required. Attendance at an accredited BCS EXIN Agile Scrum Foundation training course, is strongly recommended.

Additional Time

For Candidates Requiring Reasonable Adjustments Due to a Disability

Please refer to the reasonable adjustments policy for information on how and when to apply.

For Candidates Whose Language is Not the Language of the Examination

If the examination is taken in a language that is not the candidate's native/official language, then they are entitled to:

- 25% extra time.
- Use their own **paper** language dictionary (whose purpose is translation between the examination language and another national language) during the examination. Electronic versions of dictionaries will **not** be allowed into the examination room.

Guidelines for Accredited Training Organisations

Each major subject heading in this syllabus is assigned an allocated percentage of study time. The purpose of this is:

1) Guidance on the proportion of time allocated to each section of an accredited course.
2) Guidance on the proportion of questions in the exam.

Courses do not have to follow the same order as the syllabus and additional exercises may be included, if they add value to the training course.

Syllabus Weighting

Learning Objectives		Weight
1. Agile Way of Thinking		**10%**
	1.1 Concepts of Agile and Scrum	10%
2. Scrum Practices		**45%**
	2.1 Scrum Roles	22.5%
	2.2 Scrum Events	12.5%
	2.3 The Importance of the Backlog	7.5%
	2.4 Definition of Done	2.5%
3. Scrum Planning and Estimation		**22.5%**
	3.1 Scrum Planning	15%
	3.2 Scrum Estimation	7.5%
4. Monitoring Scrum Projects		**12.5%**
	4.1 Scrum Monitoring	12.5%
5. Advanced Scrum Concepts		**10%**
	5.1 Scrum in Different Situations	10%
	Total	**100%**

Trainer Criteria

The following criterion apply:

- Hold a BCS EXIN Foundation Certificate in Agile Scrum;
- Have 10 days training experience or a train the trainer qualification.
- Have a minimum of 3 years practical Agile experience.

Candidate Ratio

Trainers may instruct up to 15 candidates.

Invigilators may supervise up to 25 candidates.

Syllabus

Learning Objectives

1. Agile Way of Thinking – 10%

1.1. Concepts of Agile and Scrum

The candidate can…

- 1.1.1 Recognise how transformation to an Agile environment works
- 1.1.2 Recognise how Agility brings value, predictability and flexibility
- 1.1.3 Describe the Agile Manifesto
- 1.1.4 Recognise Agile methods and practices other than Scrum

2. Scrum Practices – 45%

2.1 Scrum roles

The candidate can…

- 2.1.1 Explain the Product Owner role
- 2.1.2 Explain the Scrum Master role
- 2.1.3 Explain the Development Team role
- 2.1.4 Recognise the role of a traditional Project Manager

2.2 Scrum events

The candidate can…

- 2.2.1 Explain the characteristics of time-boxed events
- 2.2.2 Explain the characteristics of Sprints
- 2.2.3 Explain the characteristics of the Daily Scrum
- 2.2.4 Explain the characteristics of the Sprint Review and the Sprint Retrospective

2.3 The importance of the Backlog

The candidate can…

- 2.3.1 Explain the characteristics of a good Product and Sprint Backlog
- 2.3.2 Recognise good User Stories and Backlog items
- 2.3.3 Explain how to refine the Product Backlog items

2.4 Definition of Done

The candidate can…

- 2.4.1 Explain the importance of a good Definition of Done.

3. Scrum Planning and Estimation – 22.5%

3.1 Scrum Planning

The candidate can…

- 3.1.1 Explain what happens during Sprint Planning meetings
- 3.1.2 Understand the rituals and the importance of the Daily Scrum
- 3.1.3 Understand how to determine the duration of a Sprint

3.2 Scrum Estimation

The candidate can…

3.2.1 Explain estimation techniques: Planning Poker, Triangulation and Affinity Estimation

3.2.2 Understand how to compute estimates using Ideal Days or Story Points

3.2.3 Understand how Backlog items are ordered

4. Monitoring Scrum Projects – 12.5%

4.1 Scrum Monitoring

The candidate can…

4.1.1 Understand Burn-Down charts

4.1.2 Understand how to monitor Sprint progress

4.1.3 Understand how to compute the velocity of the Team

4.1.4 Understand Kanban boards

4.1.5 Understand the concept and value of Information Radiators

5. Advanced Scrum Concepts – 10%

5.1 Scrum in different situations

The candidate can…

5.1.1 Recognise how to apply Scrum in large, complex projects

5.1.2 Recognise how to apply Scrum with distributed teams

5.1.3 Understand different types of contracts in Scrum

5.1.4 Understand how to create an Agile workspace

List of Basic Concepts

This chapter contains the terms with which candidates should be familiar.

Please note that knowledge of these terms alone does not suffice for the exam; the candidate must understand the concepts and be able to provide examples.

Affinity Estimation	Increment	Splitting teams
Agile Manifesto	Information radiator	Sprint
Burn-Down chart	KanBan	Sprint Backlog (item)
Burn-Up chart	MoSCoW	Sprint Planning
Coach	Niko-Niko calendar	Sprint Retrospective
Commitment	Osmotic communication	Sprint Review
Communication	Pair Programming	Story point
Continuous integration	Planning	Team
Customer	Planning Poker	Test-driven development
Daily Scrum	Priority	Time-box/Time-boxing
Definition of Done (Done)	Product Backlog (item)	Triangulation
Development team	Product owner	User Story
Distributed team	Refactoring	Velocity
DSDM	Release planning	Waterfall/Crystal Clear method
Escaped defect	Report	Workspace
Estimation	Scrum	
Extreme Programming (XP)	Scrum Master	
Ideal hours/ Ideal days	Scrum-of-Scrums	

Recommended Reading List

The knowledge required for the Foundation Scrum exam is covered in the following literature:

A. Nader K. Rad & Frank Turley
Agile Scrum Handbook
Van Haren Publishing (2nd Edition 2018)
ISBN: 9789401802796 (hard copy)
ISBN :9789401802789 (eBook)

B. Ken Schwaber & Jeff Sutherland
The Scrum Guide
http://www.scrumguides.org (most recent version)

Reading Matrix

Syllabus Learning Objectives		Literature
1. Agile Way of Thinking		
	1.1 Concepts of Agile and Scrum	A: Agility Concept (p. 8-24) A: Scaled Scrum (p. 75-82) A: Extreme Programming (p.82-89) A: DSDM (p. 89-96) B: Definition of Scrum B: Uses of Scrum B: Scrum Values
2. Scrum Practices		
	2.1 Scrum roles	A: Agile Principles (p. 15-18) A: Scrum Roles (p. 26-34) A: Scrum Events (p. 34-45) A: Scrum Artifacts (p. 45-75) B: The Scrum Team B: Scrum Events
	2.2 Scrum events	A: Practical Considerations about Adaptive Lifecycles (p. 8-11) A: Scrum Events (p. 34-45) A: Scrum Artifacts p. 45-75) B: Scrum Events
	2.3 The importance of the Backlog	A: Scrum Events (p. 34-45) A: Scrum Artifacts (p. 45-75) B: The Scrum Team B: Scrum Artifacts
	2.4 Definition of Done	A: Scrum Artifacts (p. 45-75)
3. Scrum Planning and Estimation		
	3.1 Scrum Planning	A: Practical Considerations about Adaptive Lifecycles (p. 8-11) A: Scrum Events (p. 34-45) A: Scrum Artifacts (p. 45-75) B: Scrum Events B: Scrum Artifacts

	3.2 Scrum Estimation	A: Scrum Artifacts (p. 45-75)
4. Monitoring Scrum Projects		
	4.1 Scrum Monitoring	A: Scrum Artifacts (p. 45-75) A: KanBan and ScrumBan (p. 96-103) B: Scrum Events
5. Advanced Scrum Concepts		
	5.1 Scrum in different situations	A: Practical Considerations about Adaptive Lifecycles (p. 8-11) A: Scrum Roles (p. 26-34) A: Scrum Artifacts (p. 45-75) A: Scaled Scrum (p. 75-82) A: DSDM (p. 89-96)