Unit Title:	**IT Project Management 3**
OCR unit number	20
Level:	3
Credit value:	10
Guided learning hours:	60
Unit reference number:	L/502/1114

Candidates undertaking this unit must complete real work activities in a work environment. Simulation is only allowed in exceptional circumstances (please refer to the centre handbook for further details).

Unit purpose and aim

The aim of this unit is to enable candidates to understand the business environment within which new projects are initiated. Candidates will develop an understanding of the organisation, planning, and techniques for monitoring and controlling a project.

Learning Outcomes	Assessment Criteria	Knowledge, understanding and skills
The Learner will: 1 Describe Programmes, Projects and Project Management, and the key differences when compared to Business As Usual (BAU)	**The Learner can:** 1.1 Draw representations of 3 different types of project organisation structure	Candidates must have a detailed understanding of: • 3 different types of project organisational structures including the roles and responsibilities of key personnel. • the different types of key project documentation and their purpose
2 Apply the principles of Project Risk Management	2.1 Specify and prioritise Project Risks 2.2 Specify a risk as an opportunity or a threat in a work placement / business situation 2.3 Create and maintain a Risk Log / Register 2.4 Compile an assessment of Risk Exposure for a given project	Candidates must have a detailed understanding of: • project risks and how to prioritise them • whether risks are opportunities or threats • the purpose of a risk log/register • how to conduct an assessment of risk exposure

	Learning Outcomes		Assessment Criteria	Knowledge, understanding and skills
3	Apply the principles of Project Quality Management, Change Control and Configuration Management	3.1	Complete a supplier evaluation process from given data	Candidates must have a detailed understanding of the principles of:
		3.2	Compose a Quality Plan for a given project	• project quality management to include:
		3.3	Devise suitable measurements for given quality characteristics	- supplier evaluations - quality plans - measuring quality characteristics
		3.4	Decide the action to be taken for a Request for Change (RFC)	• change control to include: - appropriate actions for RFCs
		3.5	Devise a suitable Configuration Item Record (CIR) for a given product	• configuration management to include: - CIRs
4	Use different styles of management and types of communication within a project environment.	4.1	Use communication methods to suit the purpose of the communication	Candidates must have a detailed understanding of:
		4.2	Use a management style to suit the requirements of the situation	• different types of communication methods which can be used within a project environment being aware of both the source and target of the communication • different management styles for different situations
5	Understand Team Building and Team Dynamics using standard models	5.1	Differentiate between the stages of team development recognising characteristic behaviours of each stage	Candidates must have a detailed understanding of: • team building and team dynamics
		5.2	Describe the desirable characteristics in terms of both skill and behaviour of a Project Manager	• the Tuckman model of team development
		5.3	Describe the Tuckman model of Team Development	• Belbin team roles • characteristics in relation to skills and behaviours according to the Belbin model
		5.4	Explain the use of models such as Tuckman in developing an effective team (team building)	
		5.5	List and characterise the main attributes of the nine Belbin Team Types	
6	Describe typical activities and the practical problems of estimating throughout a project / system development lifecycle	6.1	Draw a system lifecycle for a project	Candidates must have a detailed understanding of:
		6.2	Justify the choice of a system development lifecycle	• system lifecycles • differing system development lifecycles

Learning Outcomes	Assessment Criteria	Knowledge, understanding and skills
	6.3 Create a project estimate	• how to create project estimates
7 Apply project planning, monitoring, and control techniques	7.1 Prepare a representative Work Breakdown Structure (WBS) 7.2 Construct a representative PBS 7.3 Produce an Activity on Node (AoN) Network from a list of activities and their dependencies 7.4 Identify the critical path on a complex project network 7.5 Calculate the earliest and latest start and finish dates (ES, EF, LS, LF.) and the resulting float (Free and Total) 7.6 Construct a Gantt chart from an activity network 7.7 Update a project schedule to reflect actual progress 7.8 Compile a Milestone Slippage Chart 7.9 Create a project progress report for the project sponsor 7.10 Demonstrate Resource Smoothing • Select resourcing priorities 7.11 Create a Cumulative resource chart 7.12 Interpret Earned Value figures 7.13 Create a graphical representation of progress information 7.14 Extrapolate Project Outcome using Earned Value Management (EVM) Data	Candidates must have a detailed understanding of project planning, monitoring and control to include: • WBS • PBS (Product Breakdown Structure) • Node (AoN) Network • critical path analysis • calculating earliest and latest start and finish dates and hence defining free and total float values • Gantt Charts • project schedules and progress monitoring • milestone Slippage Charts • creating progress reports • resource smoothing • prioritising resources • cumulative resource charts • earned value figures • project outcomes and EVM data

Assessment

Candidates undertaking this unit must complete real work activities in order to produce evidence to demonstrate they are occupationally competent. Real work is where the candidate is engaged in activities that contribute to the aims of the organisation by whom they are employed, for example in paid employment or working in a voluntary capacity.

Simulation is only allowed for aspects of units when a candidate is required to complete a work activity that does not occur on a regular basis and therefore opportunities to complete a particular

work activity do not easily arise. When simulation is used, assessors must be confident that the simulation replicates the workplace to such an extent that candidates will be able to fully transfer their occupational competence to the workplace and real situations.

Internal quality assurance personnel must agree the use of simulated activities before they take place and must sample all evidence produced through simulated activities.

It is the assessor's role to satisfy themselves that evidence is available for all performance, knowledge and evidence requirements before they can decide that a candidate has finished a unit. Where performance and knowledge requirements allow evidence to be generated by other methods, for example by questioning the candidate, assessors must be satisfied that the candidate will be competent under these conditions or in these types of situations in the workplace in the future. Evidence of questions must include a written account of the question and the candidate's response. Observations and/or witness testimonies must be detailed and put the evidence into context ie the purpose of the work etc.

All of the assessment criteria in the unit must be achieved and clearly evidenced in the submitted work, which is externally assessed by OCR.

Evidence for the knowledge must be explicitly presented and not implied through other forms of evidence.

Evidence requirements

All aspects of the assessment criteria must be covered and evidence must be available that shows where and how the assessment criteria have been achieved.

Assessment Criterion 1

Candidates must:

- draw representations of 3 different types of project organisation structure

- create key project documentation

Assessment Criterion 2

Candidates must provide evidence of applying the principles of project risk management to a given project. This must include:

- specifying and prioritising project risks

- specifying risks as opportunities and/or threats

- creating and maintaining a risk log/register

Compiling an assessment of risk exposure

Assessment Criterion 3

Candidates must provide evidence of:

- completing a supplier evaluation process from given data

- composing a Quality Plan

- devising suitable measurements for given quality characteristics

- deciding the action to be taken for a Request for Change (RFC)

Devising a suitable Configuration Item Record (CIR) for a given product

Assessment Criterion 4

Candidates must provide evidence of:

- using 3 different communication methods within a project environment

- using 2 different management styles

The evidence may include work products, detailed observations from the assessor, detailed witness testimonies from colleagues, supervisors, managers.

Assessment Criterion 5

Candidates must provide a detailed report to include:

- differentiating between the stages of team development recognising characteristic behaviours of each stage

- a description of the desirable characteristics in terms of both skill and behaviour of a Project Manager

- a description of the Tuckman model of Team Development and how such models are used when developing effective teams

- a list of the nine Belbin Team Types including the characterisation of the main attributes

Assessment Criterion 6

Candidates must provide evidence of:

- drawing a system lifecycle for a project. There should be a detailed description of the project.

- a justification of the choice of system development lifecycle

- creating a project estimate

Assessment Criterion 7

For a given project, candidates must provide evidence of:

- preparing a representative Work Breakdown Structure (WBS)

- constructing a representative PBS

- producing an Activity on Node (AoN) Network from a list of activities and their dependencies

- identifying the critical path on a complex project network

- calculating the earliest and latest start and finish dates (ES, EF, LS, LF.) and the resulting float (Free and Total)

- constructing a Gantt chart from an activity network

- updating a project schedule to reflect actual progress

- compiling a Milestone Slippage Chart

- creating a project progress report for the project sponsor

- demonstrating Resource Smoothing

- selecting resourcing priorities

- creating a Cumulative resource chart

- interpreting Earned Value figures

- creating a graphical representation of progress information

- extrapolating Project Outcome using Earned Value Management (EVM) Data

Candidates are encouraged to choose activities which will allow them to cover all or a majority of the criteria at one time. It is not necessary to use different activities for each element of the criterion.

Guidance on assessment and evidence requirements

Evidence can reflect how the candidate carried out the process or it can be the product of a candidate's work or a product relating to the candidate's competence.

For example: The process that the candidate carries out could be recorded in a detailed personal statement or witness testimony. It is the assessor's responsibility to make sure that the evidence a candidate submits for assessment meets the requirements of the unit.

Questioning the candidate is normally an ongoing part of the assessment process, and is necessary to:

- test a candidate's knowledge of facts and procedures

- check if a candidate understands principles and theories *and*

- collect information on the type and purpose of the processes a candidate has gone through.

- candidate responses must be recorded

It is difficult to give a detailed answer to how much evidence is required as it depends on the type of evidence collected and the judgement of assessors. The main principles, however, are as follows: for a candidate to be judged competent in a unit, the evidence presented must satisfy:

- all the items listed, in the section 'Learning Outcomes'

- all the areas in the section 'Assessment Criteria'

The quality and breadth of evidence provided should determine whether an assessor is confident that a candidate is competent or not. Assessors must be convinced that candidates working on their own can work independently to the required standard.

Additional information

For further information regarding administration for this qualification, please refer to the OCR document '*Admin Guide: Vocational Qualifications' (A850)* on the OCR website www.ocr.org.uk .