

Unit title:	Management of projects	
Unit number:	1	
Level:	4	
Credit value:	15	
Guided learning hours:	60	
Unit reference number:	J/601/0302	

# **UNIT AIM AND PURPOSE**

This unit will enable learners to develop their understanding of managing projects. They will understand the principles of project management and have the opportunity to plan and manage projects, applying project management techniques. There is an opportunity for learners to gain an insight in to how to manage complex IT projects.

# LEARNING OUTCOMES AND ASSESSMENT CRITERIA

A pass grade is achieved by meeting **all** the requirements in the assessment criteria.

Learning Outcome (LO)		Pass	
			assessment criteria are the pass rements for this unit.
The Learner will:		The Learner can:	
LO1 Understand the principles of management	project	1.1	explain the principles of project management
		1.2	discuss viability of projects with particular emphasis on the criteria for success/failure
		1.3	explore principles behind project management systems and procedures
		1.4	explain key elements involved in terminating projects and conducting post-project appraisals
LO2 Be able to plan a project in terms of organisation and people		2.1	plan the most appropriate organisational structure
		2.2	discuss roles and responsibilities of participants within a project
		2.3	carry out the control and coordination of a project
		2.4	document project leadership requirements and qualities
		2.5	plan specific human resources and requirements for a project

LO3 Be able to manage project processes and procedures	3.1 design the project organisation with reference to prepared project management plans
	3.2 use project scheduling and cost control techniques
	3.3 report the methods used to measure project performance
	3.4 report project change control procedures
	3.5 discuss the outcomes of the project and make recommendations

# **GRADING CRITERIA**

A merit grade is achieved by meeting **all** the requirements in the pass criteria **and** the merit descriptors.

A distinction grade is achieved by meeting **all** the requirements in the pass criteria **and** the merit descriptors **and** the distinction descriptors.

Merit Criteria (M1, M2, M3)	Distinction Criteria (D1, D2, D3)	
(M1, M2, and M3 are mandatory to achieve a merit grade. Each must be achieved at least once per unit to achieve a merit grade.)	(D1, D2, and D3 are mandatory to achieve a distinction grade. Each must be achieved at least once per unit to achieve a distinction grade.)	
	(In order to achieve a distinction grade, all merit criteria must also have been achieved.)	
MANDATORY TO ACHIEVE A MERIT GRADE	MANDATORY TO ACHIEVE A DISTINCTION GRADE	
M1 Analyse concepts, theories or principles to formulate own responses to situations.	D1 Evaluate approaches to develop strategies in response to actual or anticipated situations.	
M2 Analyse own knowledge, understanding and skills to define areas for development.	D2 Evaluate and apply strategies to develop own knowledge, understanding and skills.	
M3 Exercise autonomy and judgement when implementing established courses of action.	D3 Determine, direct and communicate new courses of action.	

#### **TEACHING CONTENT**

The Teaching Content describes what has to be taught to cover **all** Learning Outcomes.

Learners must be able to apply relevant examples to their work although these do not have to be the same as the examples specified.

LO1	Understand the	principles of	project management

Project Definition of project management, examples of

techniques and resources (e.g. people, time, money,

equipment)

Viability Feasibility reports, business case (e.g. business aims

and strategic planning), compliance (e.g. regulatory, internal process management and quality assurance)

financial modelling (e.g. contingency costing,

accuracy of estimates), project management process (e.g. sign off, project authority), risk modelling (e.g.

reputational, technological, financial, non-

implementation), techniques for modelling project viability (e.g. SWOT analysis) financial estimating

(NPV and DCF)

Success/fail criteria Metrics and development of KPIs for project,

budgeting and financial control of project resources, project team communication and management

reporting

Project management

systems

Differing models of the system's lifecycle (e.g. waterfall and agile models), typical project phases and work streams associated with those phases, leadership and integration of people and material

resources to deliver projects

Termination Project termination (e.g. audit, handover, documents,

contracts), post implementation reviews and

feedback systems.

### LO2 Be able to plan a project in terms of organisation and people

Organisational structure Different styles of organisational design (e.g. matrix,

project, functional), qualitative influences on project management (e.g. company culture, distribution of project team, client and supplier relationship)

Roles and responsibilities 
Importance of differing roles (e.g. sponsor, project

manager, programme manager), project control and

importance of assigning clear responsibilities

Coordination and control Scoping of work packs/work streams, monitoring of

project performance using KPIs (e.g. use of 'dashboards', analytics), in-process reporting and communication, change control and change management processes, leadership of teams and use of soft skills to manage project progress

Qualities Leadership skills, project team skills analysis and

team development (e.g. Belbin, Tuckman), developing

clear job descriptions and planning resource

requirements

Human resources Job description, efficient deployment of human

resource.

# LO3 Be able to manage project processes and procedures

Change control Managing change, use of change control process,

impact assessment (e.g. authorisation level, change of scope), client involvement, types of change (e.g. scope, milestones, costs), computer-based

scheduling and resourcing techniques

Methods to measure Plans vs actuals, informal measuring (e.g. 'walking

the job'), PMS specific techniques for measurement and control (e.g. Lean, Prince2, Agile), work package cost estimation, critical path analysis, time-boxing

Recommendations Role of post-implementation review, feedback to

team members, development of case studies for

future learning.

#### **GUIDANCE**

## **Delivery guidance**

It will be beneficial to deliver this unit in a way that uses actual events, industry forecasts or sector specific contexts which offer the learner the opportunity to explore, develop and apply the fundamental principles of the sector or subject area.

This unit could be a project undertaken by the learner starting with the theoretical basis for the project, following through using appropriate processes to cover all the Learning Objectives. Possible topics could be a system upgrade or producing a new section for a website or implementing a new system. The learner could be working as part of a team reflecting on their use of procedures, their response to the stages of the project and the skills they, and others, demonstrate in the delivery of the project. They could compare their experience with others to consider different sectors.

Learners will benefit from being encouraged to exercise autonomy and judgement to, for example, select a methodology and develop a plan for their specific project, adapt their thinking and reach considered conclusions, which could help them identify areas of interest to them personally (based on a foundation of relevant knowledge, understanding and/or practical skills).

Learners would benefit from being presented with subject/sector-relevant problems from a variety of perspectives and from being given the opportunity to explore them using a variety of approaches and schools of thought. For example, focus on software development or product deployment in the IT sector with both consumer and business to business products. Any involvement learners have in large projects will give them the opportunity for observation and reflection, but there may not be scope for learners to take responsibility.

#### Assessment evidence guidance

Evidence must be produced to show how a learner has met each of the Learning Outcomes. This evidence could take the form of be assignments, project portfolios, presentations or, where appropriate, reflective accounts.

Where group work/activities contribute to assessment evidence the individual contribution of each learner must be clearly identified.

All evidence must be available for the visiting moderator to review. Where learners are able to use real situations or observations from work placement, care should be taken to ensure that the record of observation accurately reflects the learner's performance. This should be signed, dated, and included in the evidence. It is best practice to record another individual's perspective of how a practical activity was carried out. Centres may wish to use a witness statement as a record of observation. This should be signed and dated and included in the evidence.

#### **RESOURCES**

#### Books

Bruce, A & Langdon K, Project Management (DK Essential Managers), 2000.

Marks T 20:20 Project Management: How to Deliver on Time, on Budget and on Spec, 2012.

Graham, N, Agile Project Management for Dummies, 2010.

#### **Websites**

Range of useful templates and guidance for business analysis: www.businessballs.com

PMI UK is a professional project management membership organisation in the UK: www.pmi.org.uk/

Team roles: www.belbin.com/

Mintzberg management roles and organisation also includes self-assessment quizzes <a href="https://www.mindtools.com/pages/article/management-roles.htm">www.mindtools.com/pages/article/management-roles.htm</a>

www.practical-management.com/Project-Management/General-Project-Management-Principles.html

Institute of Project Management. URL:http://www.pmi.org.uk
Range of academic papers including project management skills for adult education
<a href="https://www.davidhartl.com/">www.davidhartl.com/</a>

www.gov.uk/government/publications/best-management-practice-portfolio

Cabinet office:

www.best-management-practice.com/

www.prince2.com

www.scrum.org/

<u>www.mpug.com/education/what-is-project-management/</u> quite good background for definitions and roles

 $\underline{www.successful\text{-}project\text{-}management.com/project\text{-}management\text{-}role.html}} \text{ -}e.g. \ duties \ and \ roles \ etc}$ 

www.techrepublic.com/blog/tech-manager/why-critical-path-is-critical-to-project-management/2039

http://agilescout.com/agile-is-not-a-methodology/

Wikipedia: project management methodologies

BSB and the Squarial: www.colin99.co.uk/bsb.html

Eurotunnel and other railway projects: <a href="http://www.railway-technology.com/projects/channel-tunnel/">http://www.railway-technology.com/projects/channel-tunnel/</a>

SMART objectives: <a href="http://www.learnmarketing.net/smart.htm">http://www.learnmarketing.net/smart.htm</a>

Cost plus project pricing; <a href="http://construction.about.com/od/Procurement-Process/a/Cost-Plus-Contract-Basics.htm">http://construction.about.com/od/Procurement-Process/a/Cost-Plus-Contract-Basics.htm</a>