Unit 281 Project Management 2

Credit 4

Level 2

QCA accreditation number

Rationale

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 and planning that underpins a basic project.

Outcomes
There are four outcomes to this unit. The candidate will be able to
1. Describe Projects and Project Management
2. Demonstrate an understanding of the principles of project management
3. Describe the typical activities within system and project life-cycles
4. Apply the principles of project planning and control

Guided learning hours

The recommended guided learning hours for this unit are 30 hours.

Connections with other awards

Key Skills links

Communication	C2.1a, C2.1b, C2.2,C2.3
Application of Number	N2.1, N2.2, N2.3
Information technology	none
Working with others	WO2.1
Improving own learning	LP2.1, LP2.2
Problem solving	PS2.1, PS2.2

Assessment
Assessment will be by means of a set assignment covering practical activities and underpinning knowledge.

Outcome 1: Describe Projects and Project Management

Practical activities
The candidate will be able to:

- Identify 3 different types of project organisation structure
- Identify key roles and responsibilities within a project's organisation structure ie
    - Sponsor (Executive)
    - Users
    - Suppliers
    - Project Manager
    - Team Manager (Leader)
    - Project Support Office
- create key project documentation
    - Project Plan
    - The Business Case
    - The Project Management Plan (PMP)
    - Project Initiation Document (PID)
- Identify and create the key criteria required in order to deliver a successful project
    - Objectives – Specific Measurable Agreed Realist Time-bound Evaluated Reviewed (SMARTER)
    - Constraints
    - Requirements
- Calculate the viability of a project using Investment Appraisal techniques
    - Payback period
    - Discounted Cash Flow (DCF) / Net Present Value (NPV)
- Calculate the Return on investment (ROI) for a given project

Underpinning knowledge
The candidate must be able to:

- Identify what is:
    - Business As Usual
    - A Project
    - Project Management
- Compare and contrast the 3 different types of project organisation structure
    - Hierarchical
    - Matrix
    - Project
- List the responsibilities of the key project roles
    - Sponsor (Executive)
    - Users
    - Suppliers
    - Project Manager
    - Team Manager (Leader)
    - Project Support Office
- Describe the purpose of key project documentation
    - Project Plan
    - The PMP / PID
    - The Business Case
- State the generic content of key project documentation

    - Project Plan
    - The PMP / PID
    - The Business Case
        - Reasons
        - Options
        - Benefits
        - Risks
        - Costs
        - Timescales
        - Investment Appraisal
        - Evaluation
- Define ‘Return On Investment’ (ROI)

Outcome 2: Demonstrate an understanding of the principles of project management

Practical activities
The candidate will be able to:

- Collect and present progress information
- Create a basic project estimate.
- Tailor the amount of planning effort required for different projects.
- Separate the constraints from the dependencies.

Underpinning knowledge
The candidate will be able to:

- State the nature and purposes for which project information is gathered.
- describe the activities that occur during the 4 generic project management processes.
- Describe the source and content of the project objectives and requirements.
- List the benefits of project management
- List some of the challenges that organisations face when using project management
- Explain the purpose, benefits and types of Project Meetings
    1. Team Meetings
    2. Project Board Meetings
    3. Programme Board / Steering Group meetings
- Explain the purpose and use of Timesheets
- Describe the Project Management Process Flow
- Describe the four generic project management processes
    1. Starting or initiation process
    2. Defining and planning process
    3. Monitoring and control process
    4. Learning and closing process
- Explain the purpose and underlying principles of Project Planning Estimating and Control
    1. Subjective and Comparative Estimating
    2. The effects of over / under estimating
    3. effort versus duration
    4. the relationship between effort and cost
    5. planning effort for different size project
- Describe, in basic terms, the following elements of project management
    1. Planning and estimating
    2. monitoring and control
    3. issue management
    4. project change control
    5. risk management
    6. project assurance
    7. project organisation
    8. business change management

Outcome 3: Describe the typical activities within system and project life-cycles

Practical Activities
The candidate will be able to:
- Compare and contrast project and system lifecycles
- Draw and describe an example of a system lifecycle
- Obtain an example of a project or system lifecycle
- Select the correct system development lifecycle for a given situation

Underpinning knowledge
The candidate must be able to:
- Define the typical activities in a system development lifecycle (SDLC)
    - Initiation
    - Feasibility Study
    - Project set-up
    - Requirements analysis and specification
    - Design
    - Construction
    - Acceptance testing
    - Implementation
    - Maintenance
- describe a designated development lifecycles
    - Waterfall method
    - Incremental model
    - Iterative model
- Describe the phases of an extended lifecycle
    - Concept
    - Feasibility
    - Implementation
    - Operation
    - Termination
- Describe and contrast different implementation strategies
    - direct changeover
    - parallel running
    - phased take-on
    - pilot changeover

Outcome 4: Apply the principles of project planning and control

Practical activities

The candidate will be able to:

- Draw a simple Work Breakdown Structure (WBS)
    1. Table Format
    2. Diagram Format
- Draw a simple Product Breakdown Structure (PBS)
- Produce an Activity on Node (AoN) Network from a list of activities and dependencies
- Identify the critical path on a basic project network using a given formula.
- Calculate the earliest and latest start and finish dates (ES, EF, LS, LF)
- Calculate the total float on activities in an AoN Network
- Construct a Gantt chart from an AoN activity network
- Represent graphically the resource requirements for a simple project
- Use control techniques to monitor progress against targets and adjust plans accordingly

Underpinning knowledge

The candidate will be able to:

- Define Project Scope
- Describe the content and creation of Work Breakdown Structures
- describe the sequence from product based to activity based planning
- Explain Project Scheduling techniques
    - Activity on Node network
    - Product Flow Diagram
- describe the relationships between activities and the dependencies including:
    - Finish to Start
    - Start to Start
    - Finish to Finish
- Explain the importance of the critical path on a network
- Describe how a resource histogram is created
- Explain and give examples of corrective action
    - extending timescale
    - increasing resources