
Overview

The standard covers competences you need to plan and run scientific or technical projects for the workplace activities in accordance with approved procedures and practices.

You will be required to demonstrate that you can plan and run scientific or technical projects using meticulous planning involving management, colleagues, customers/clients and a wide range of resources. You will meet objectives, deadlines and targets in accordance with workplace procedures.

The activity is likely to be undertaken by someone in a science related work setting, including individuals working in hospitals, scientific laboratories, schools and universities.

Performance criteria

- You must be able to:*
- P1 ensure that your work is carried out in accordance with workplace procedures
 - P2 use safe practices and the appropriate personal protection equipment (PPE) where scientific or technical activities are performed
 - P3 identify and agree the business and scientific or technical requirements of your role in the workplace
 - P4 establish processes that deliver scientific or technical outcomes based on organisational goals and aims
 - P5 evaluate available information and consult with others to prepare project plans for the delivery of scientific or technical activities
 - P6 submit proposed projects to the relevant people in the organisation, for approval and to assist the overall planning process
 - P7 use the agreed project plans to start, monitor and control delivery of scientific or technical activities
 - P8 evaluate variances between what was planned and what actually happened on the project
 - P9 take prompt corrective action, obtaining agreement from the relevant people if required, to delivery the critical project outcomes
 - P10 propose revisions to the project plan, if necessary, in response to variances and/or significant or unforeseen developments, and discuss and agree the revisions with the relevant people in the organisation
 - P11 provide ongoing information on performance against the project plan to relevant people in your organisation
 - P12 gather information from implementation of the project plan to assist in the preparation of future project plans
 - P13 present the results of the work done to the appropriate people, in accordance with departmental and organisational procedures

Knowledge and understanding

- You need to know and understand:*
- K1 the health and safety requirements of the area in which you are carrying out the scientific or technical activities
 - K2 the implications of not taking account of legislation, regulations, standards and guidelines when conducting scientific or technical activities
 - K3 the scientific or technical techniques and processes you must use correctly in the workplace.
 - K4 the importance of wearing protective clothing, gloves and eye protection for scientific or technical activities
 - K5 the importance of correct identification, and any unique workplace coding system
 - K6 the organisational requirements for maintaining the security of the workplace and keeping confidential documents
 - K7 the workplace business aims and goals and the planning process
 - K8 the workplace organisational structure, its values and culture
 - K9 how your scientific or technical activities add value through delivering workplace products, services and processes
 - K10 the lines of communication and responsibilities in your department, and the links with the rest of the organisation
 - K11 the limits of your own authority and to whom you should report if you have problems that you cannot resolve
 - K12 how to identify and assess the scientific or technical requirements of your work role
 - K13 the different ways in which you are set your agreed personal work objectives
 - K14 the different perspectives and approaches that are important when exercising autonomy or judgement about scientific or technical activities used
 - K15 the types of investigation initiated and used to review the effectiveness or appropriateness of methods, action and results of your scientific or technical work
 - K16 the consequences of breaches of quality procedures
 - K17 how to identify hazards and what action to take
 - K18 what systems are used to ensure quality within the workplace and the projects delivered
 - K19 the methods used to plan projects and the activities and tasks associated with them
 - K20 what standards and workplace procedures are appropriate to scientific or technical projects
 - K21 who are the project customers, and how to elicit and confirm their requirements
 - K22 how to develop and monitor detailed project objectives from plans
 - K23 how to clarify and agree project objectives with the customer
 - K24 why it is important to explore and evaluate alternative project plans

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- K25 who needs to be consulted when planning and resourcing project plans
 - K26 how to write the project plan, incorporating all necessary detail into the plan
 - K27 how to make efficient use of resources
 - K28 how to evaluate variances between plans and what actually being delivered on the project
 - K29 the range of corrective actions that can be used when delivery of the critical outcomes may be under threat
 - K30 how to update and revise project plans in response to variances and/or significant or unforeseen developments, and who should be consulted
 - K31 how to provide information/reports on performance during and after projects
 - K32 the document control and reporting procedures that should be used
 - K33 the reasons why effective communication is important, and the methods used for communicating effectively

Scope/range

1. prepare a project plan for scientific or technical activities that:
 - 1.1 can deliver outcomes in line with workplace goals and aims plus all of the following:
 - 1.2 identifies and explores alternative strategies for delivery
 - 1.3 take into account the views of the project team and any other relevant people
 - 1.4 incorporates all relevant time, cost and delivery measures/milestones
 - 1.5 makes efficient use of available resources

2. devise project plans with two of the following components:
 - 2.1 multi stage/activity operations
 - 2.2 high level of skill/experience needed
 - 2.3 multitasking requirements
 - 2.4 constraints (e.g. resources, regulatory)
 - 2.5 multi-parameter or control factors
 - 2.6 critical path dependencies

3. consult two of the following people during the preparation and running of projects:
 - 3.1 supervisor
 - 3.2 team leader
 - 3.3 teacher or trainer
 - 3.4 manager
 - 3.5 head of department
 - 3.6 customer
 - 3.7 the project team
 - 3.8 health and safety officer

4. confirm project objectives are all of the following:
 - 4.1 specific
 - 4.2 measurable
 - 4.3 achievable
 - 4.4 realistic
 - 4.5 time bound

5. quantify four of following resource requirements for projects:
 - 5.1 materials
 - 5.2 equipment
 - 5.3 financial
 - 5.4 time
 - 5.5 personnel

6. deliver projects with two of the following critical outcomes:

6.1 specified output quality

6.2 within defined budget

6.3 against fixed timescale

7. record and communicate details of the work done, to the appropriate people, using:

7.1 verbal report plus one method from the following:

7.2 written or typed report

7.3 computer-based record

7.4 specific workplace documentation

7.5 electronic mail

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