



Australian Government

Department of Education, Employment and Workplace Relations

PSPSCI301A Assist with scientific technical support

Release 3

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Modification History

Release	TP Version	Comments
3	PSP12V1	Unit descriptor edited.
2	PSP04V4.2.	Layout adjusted. No changes to content.
1	PSP04V4.1	Primary release.

Unit Descriptor

This unit covers the provision of technical support in a scientific/research environment under routine guidance, with full responsibility for delegated technical duties such as experimental, survey, sampling and/or analytical tasks. It includes identifying and organising technical duties, and assisting in the collection, recording and presentation of information.

In practice, assistance with technical support overlaps with other generalist or specialist work activities such as working effectively, acting ethically, using resources, organising information, working safely.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements are the essential outcomes of the unit of competency. Together, performance criteria specify the requirements for competent performance. Text in ***bold italics*** is explained in the Range Statement following.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- | | |
|---|--|
| 1. Identify and organise technical duties | 1.1 Delegated <i>technical duties</i> and responsibilities are identified and confirmed with <i>other staff members</i> in accordance with organisational requirements.
1.2 <i>Processes, resources</i> , timelines and <i>equipment</i> requirements are identified for delegated duties in accordance with organisational and task requirements.
1.3 Risk management practices, occupational health and safety, environmental and <i>other legislative requirements</i> are identified.
1.4 Resources and equipment are obtained and prepared in accordance with organisational and task requirements. |
| 2. Assist in the collection and recording of information | 2.1 Technical duties are carried out under routine guidance in accordance with organisational requirements.
2.2 Information is collected and recorded in accordance with set processes and timelines.
2.3 Resources and equipment are used and maintained in accordance with organisational and task requirements.
2.4 Risk management practices, occupational health and safety, environmental and other legislative requirements are followed in accordance with organisational requirements. |
| 3. Assist in the presentation of data | 3.1 Data records are maintained in accordance with organisational requirements.
3.2 Data is manipulated and reports are generated in accordance with organisational and task requirements. |

Required Skills and Knowledge

This section describes the essential skills and knowledge and their level, required for this unit.

Skill requirements

Look for evidence that confirms skills in:

- analysing/manipulating mathematical data
- observing and reporting
- using a range of communication styles to suit different audiences and purposes
- responding to diversity, including gender and disability
- reading formal documents such as legislation and instructions and applying them in the workplace
- using technology for word processing and data management
- operating machinery and experimental equipment
- applying occupational health and safety and environmental requirements related to working in a scientific/technological research environment

Knowledge requirement

Look for evidence that confirms knowledge and understanding of:

- legislation, regulations, policies, procedures and guidelines relating to the provision of scientific technical support
- basic experimental procedures and scientific methods
- basic analytical techniques/simple statistical analysis
- the scientific/technological area (broad understanding)
- public sector standards and organisational code of practice as they relate to work in a scientific research/technical environment
- standard operating procedures and/or work instructions
- working with others in a scientific/technical environment
- occupational health and safety, environmental protection and other public sector legislation
- technical support work relevant to specialist area (developing knowledge)

Evidence Guide

The Evidence Guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the Unit descriptor, Performance Criteria, the Range Statement and the Assessment Guidelines for the Public Sector Training Package.

Units to be assessed together

- *Pre-requisite* units that must be achieved prior to this unit: *Nil*
- *Co-requisite* units that must be assessed with this unit: *Nil*
- *Co-assessed units* that may be assessed with this unit to increase the efficiency and realism of the assessment process include, but are not limited to:
 - PSPETHC301B Uphold the values and principles of public service
 - PSPGOV301B Work effectively in the organisation
 - PSPGOV302B Contribute to workgroup activities
 - PSPGOV307B Organise workplace information
 - PSPLEGN301B Comply with legislation in the public sector
 - PSPOHS301A Contribute to workplace safety

Overview of evidence requirements

In addition to integrated demonstration of the elements and their related performance criteria, look for evidence that confirms:

- the knowledge requirements of this unit
- the skill requirements of this unit
- application of the Employability Skills as they relate to this unit (see Employability Summaries in Qualifications Framework)
- full responsibility taken for delegated scientific technical duties in a range of (3 or more) contexts such as experimental, survey, sampling and/or analytical tasks (or occasions over time)

Resources required to carry out assessment

These resources include:

- legislation, procedures, guidelines and protocols
- operating procedures/work instructions
- industry standards
- scientific/technological equipment and machinery related to the research environment
- personal protective equipment
- case studies and workplace scenarios to capture the range of situations likely to be encountered when assisting with scientific technical support

Where and how to assess evidence

Valid assessment of this unit requires:

- a workplace environment or one that closely resembles normal work practice and replicates the range of conditions likely to be encountered when assisting with scientific technical support, including coping with difficulties, irregularities and breakdowns in routine
- full responsibility taken for delegated scientific technical duties in a range of (3 or more) contexts such as experimental, survey, sampling and/or analytical tasks (or occasions over time)

Assessment methods should reflect workplace demands, such as literacy, and the needs of particular groups, such as:

- people with disabilities
- people from culturally and linguistically diverse backgrounds
- Aboriginal and Torres Strait Islander people
- women
- young people
- older people
- people in rural and remote locations

Assessment methods suitable for valid and reliable assessment of this competency may include, but are not limited to, a combination of 2 or more of:

- case studies
- demonstration
- observation
- portfolios
- projects
- questioning
- scenarios
- simulation or role plays
- authenticated evidence from the workplace and/or training courses

For consistency of assessment

Evidence must be gathered over time in a range of contexts to ensure the person can achieve the unit outcome and apply the competency in different situations or environments

Range Statement

The Range Statement provides information about the context in which the unit of competency is carried out. The variables cater for differences between States and Territories and the Commonwealth, and between organisations and workplaces. They allow for different work requirements, work practices and knowledge. The Range Statement also provides a focus for assessment. It relates to the unit as a whole. Text in ***bold italics*** in the Performance Criteria is explained here.

Technical duties may include:

- surveys
- sampling
- experiments
- trials
- tests
- assays
- surveillance
- collecting specimens
- inspections
- identification of plants or animals
- identification of pests
- operation, calibration and maintenance of experimental equipment
- diagnostic processes
- producing specimen images

Other staff members may include:

- supervisors
- project managers
- line managers

Processes may include:

- experimental processes
- observation
- field trials

Resources may include:

- design specifications
- technical manuals
- componentry
- radioactive samples
- specimens
- plants
- seeds
- chemicals
- personal protective equipment

Equipment may include:

- prototypes
- test rigs

- Other legislative requirements** may include:
- tools
 - diagnostic instruments
 - laboratory equipment
 - experimental equipment
 - farm equipment
 - quarantine or protection requirements
 - copyright and intellectual property legislation
 - Australian standards

Unit Sector(s)

Not applicable.

Competency field

Government Science & Technology.