



Australian Government

POLFOR034 Conduct applied research

Release: 1

POLFOR034 Conduct applied research

Modification History

Release	Comments
1	This unit was released in POL Police Training Package release 8.0

Application

This unit describes the skills required to conduct applied research in forensic crime scene investigation. It applies to specialist police personnel and forensic staff as part of their involvement in the forensic crime scene investigation discipline. The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to, particularly those related to quality management, case management systems, forensic investigations and work health and safety (WHS). Candidates undertaking this unit would be required to work autonomously. They would demonstrate the ability to manage a research project.

No licensing, legislative or certification requirements apply to unit at the time of publication.

Pre-requisite Unit

Not applicable

Competency Field

Not applicable

Unit Sector

Not applicable

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes of the unit	Performance criteria describe the performance needed to demonstrate achievement of the element.

1. Evaluate scientific literature and research findings critically	1.1 Identify current gaps in empirical evidence to support techniques and disciplines. 1.2 Identify sources of contemporary information that may be relevant to the identified question. 1.3 Critically evaluate scientific literature and research findings. 1.4 Develop recommendations on necessary research and best practice based on contemporary research and literature.
2. Planning for applied research	2.1 Develop hypothesis to guide research proposal. 2.2 Conduct a literature review. 2.3 Evaluate advantages and disadvantages of data/information collection techniques. 2.4 Analyse research methodology in terms of suitability and potential limitations. 2.5 Develop research methodology to address research question. 2.6 Identify factors that may impact on reliability and validity of the results. 2.7 Identify resources for the research, taking into consideration cost, availability, and access. 2.8 Identify alternative resources or methodologies to ensure that the scope of the research project is met.
3. Conduct applied research	3.1 Apply research design including but not limited to considerations of efficacy, relevance, logistics and ethics. 3.2 Collect research data. 3.3 Analysis of the research data. 3.4 Evaluate results against the hypothesis. 3.5 Review data and research findings for accuracy.
4. Present applied research	4.1 Articulate the research aim (problem), hypothesis and questions. 4.2 Present the research methodology, analysis and evaluation and contextualisation of results. 4.3 Qualify the significance of the research and the theoretical, empirical and/or practical implications of the findings. 4.4 Report research findings to inform broader forensic community.

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance. Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed in the table below.

The ability to interpret messages and text, record observations and evidence, communicate with purpose to different communities and audiences, plan and schedule tasks according to estimated timeframes, continuously seek to learn through on-the-job observations, solve problems, work with others in a team, plan and organise activities and self-manage behaviour are core foundation skills relevant to the policing context.

Skill	Description
Learning	Acknowledge limitations of the information/evidence when providing an expert opinion. Liaise with peers to review opinions of self and others.
Reading	Read and evaluate information relevant to the investigation critically to form an expert opinion. Review data and research findings for accuracy and compliance with legal requirements. Read and review information in a case file to determine quality, accuracy and completeness. Evaluate contemporary information to determine potential applicability and suitability within forensic investigations.
Writing	Developing research proposals, including hypotheses, jurisdictional context and research methodology. Use written means to report research findings to inform broader forensic community. Develop written recommendations on better practice.
Oral Communication	Communicate information that includes the description of a complex opinion/point of view/argument in a clear, concise manner to a wide range of audiences. Report expert opinion to others as required. Deliver expert opinion to aid judicial enquiry process.
Numeracy	Read and interpret mathematical concepts in complex forensic information.

Range of Conditions

Not applicable

Unit Mapping Information

This unit replaces but is not equivalent to *POLFOR004 Develop forensic crime scene expertise*.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=98c3984e-2cf1-48a8-8ed1-85e4b92e7351>

Assessment Requirements for POLFOR034 Conduct applied research

Modification History

Release	Comments
1	This unit was released in POL Police Training Package release 8.0

Performance Evidence

The candidate must provide evidence on at least one occasion that they have met the elements and performance criteria and have demonstrated the ability to:

- develop research proposals, including hypotheses, jurisdictional context, and research methodology
- collect and collate information from diverse sources
- plan, conduct, present research
- evaluate applied research proposals
- analyse data to identify solutions and make informed decisions
- conduct applied research and present findings
- communicate information that includes describing complex opinion/point of view/argument in an articulate and informative manner to a wide range of audiences
- interpret and analyse information critically to develop opinions
- justify opinions and their rationale
- liaise with peers to review opinions of self and others
- evaluate forensic information and its application to own professional context.

Knowledge Evidence

The candidate must provide demonstrated evidence that they have knowledge of:

- forensic investigation methods, techniques, procedures, and related disciplines
- applied research skills, including research design, principles of reliability and evaluation process
- purposes and limitations, of quantitative and qualitative research approaches
- ethical considerations in research as it relates to the interpretation of crime scenes and physical evidence
- knowledge of sources of research and information related to forensic science
- limitations, human cognitive factors, and boundaries of specialist knowledge.

Assessment Conditions

Assessment must occur in operational workplace situations or, where this is not available, in simulated situations that replicate workplace conditions. Assessors of this unit must satisfy relevant vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=98c3984e-2cf1-48a8-8ed1-85e4b92e7351>