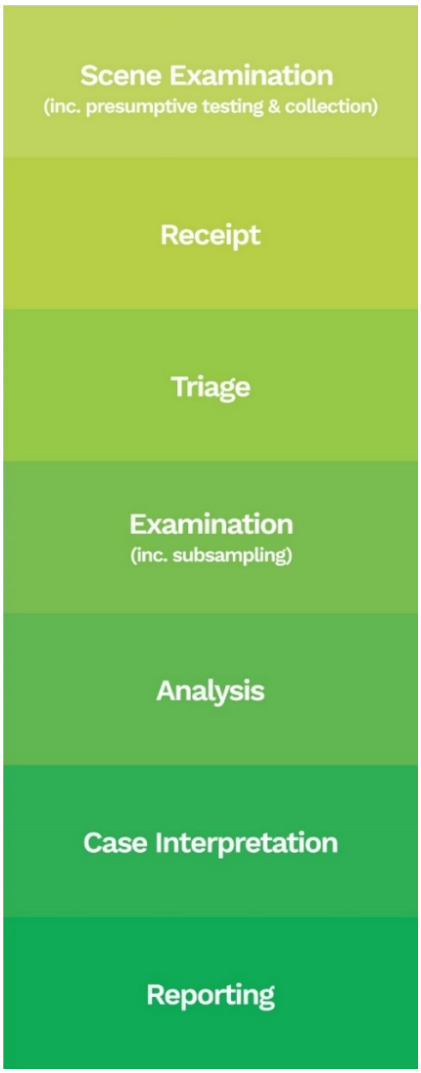
2020

NATA
ACCREDITED FOR TECHNICAL COMPETENCE
BUREAU VERITAS

forensic FOUNDATIONS™
ISO 9001 & ISO/IEC 17043

Proficiencytesting @ forensicfoundations



Testing the end-to-end forensic process

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Proficiencytesting@forensicfoundations

Forensic Foundations' Proficiency Tests are designed to address the following issues:

- Relevance to forensic science / medicine facilities;
- Limitation of any potential context information;
- Knowledge of the 'ground truth' of the samples; and
- Cost affordability.

ISO17025:2017 identifies risk management as an integral component of any scientific testing. Forensic Foundations has adopted this approach and has designed its Proficiency Tests to address risks, where possible, at all stages of the forensic process. The table in Appendix A outlines some of the risks associated with each stage of the forensic process.

Forensic Foundations has also adopted the framework embodied in the AS 5388 'Forensic Analysis' and the ISO 21043 'Forensic Sciences' series of Standards. These Standards describe the forensic examination process from collection to reporting. All Forensic Foundations' Proficiency Tests commence with item collection and/or receipt and all the subsequent examination/analysis steps, culminating in the reporting, thus reflecting actual forensic casework. Further detail regarding the inter-relatedness of all phases of the forensic process is described in Appendix B.

Forensic Foundations is accredited to ISO17043 'Conformity Assessment – General requirements for proficiency testing' and currently forensic biology and chemical criminalistics are covered by the scope of accreditation. Fingerprint examination and document examination will be added in February/March 2020.

Forensic Foundations' Proficiency Tests comply with the requirements of:

- ISO17025:2017 General requirements for the competence of testing and calibration laboratories;
- AS 5388 1-4 'Forensic Analysis';
- ISO 21043 'Forensic Sciences' 1 & 2;
- NATA General Accreditation Criteria Proficiency Testing Policy (2018);
- NATA Specific Accreditation Criteria: ISO/IEC 17025 Application Document, Legal (including Forensic Science) – Appendix (2018);
- ANAB ISO/IEC 17025:2017 – Forensic Science Testing and Calibration Laboratories Accreditation Requirements (2019);
- ANAB Accreditation Manual for Forensic Service Providers (2019); and
- Guidance on the Conduct of Proficiency Tests and Collaborative Exercises Within ENSFI (2014).

In addition to offering a program of proficiency tests, Forensic Foundations also offers a number of inter-laboratory collaborative trials. These trials are offered where the test is still in the development phase and/or the test is niche and/or the field of study is not currently covered by our scope of accreditation.

As Forensic Foundations' proficiency tests and interlaboratory collaborative trials are designed to be fit-for-purpose, it is essential that we receive feedback on our products and suggestions from our clients for new programs. Appendix C contains a form which can be used to recommend additional tests/trials.

For more information or to discuss our 2020 program, please contact quality@forensicfoundations.com.au.

Pricing structure

The pricing structure has been calculated to be affordable and flexible.

Please contact Forensic Foundations to discuss multiple test discounts.

Description		Cost (inc freight)
Proficiency Test	Test samples and associated paperwork will be provided. Results to be submitted and reviewed. Final report including manufacturer's instructions provided for each test.	AUD750
Training Kit	Test samples, associated paperwork and the manufacturer's instructions will be provided. This test has no external review and can be used for training purposes. This test is shipped following the distribution of the final proficiency test report.	AUD250
Interlaboratory Collaborative Trial	Test samples and associated paperwork will be provided. Results to be submitted and reviewed. Final report including manufacturer's instructions provided for each test.	AUD500

Ordering information

Proficiency tests and interlaboratory collaborative trials can be ordered either on line at https://www.forensicfoundations.com.au/ or by contacting quality@forensicfoundations.com.au.

Payment may be made either by credit card or by EFT.

Tax invoices will be produced on request.

2020 Program snapshot

Test ID	Discipline and subdiscipline	Summary of the Scenario	Last date for orders	Distribution	Results submitted	Final Report distributed
Proficiency Tests						
2020-1	Forensic Biology – Biological examination and DNA -1	A female complainant has been sexually assaulted. Participants will be provided with the complainant's medical samples and reference sample. Reference samples will also be provided from the suspects.	February 2020	March 2020	May 2020	July 2020
2020-2	Biology / Crime Scene Examination - BPA	An elderly man attended the emergency department with lacerations to his head and face. He has no recollection of how the injuries were sustained. A property is located which may be the scene of the assault. Is the blood staining at this property consistent with the injuries sustained? Participants will be provided with a detailed description of the injuries and photographs of the scene.	March 2020	April 2020	June 2020	August 2020
2020-3	Fingerprint detection, enhancement and identification	Items collected from the crime have been submitted for fingerprinting. The participant laboratory will be asked to examine the items for any latent fingerprint present. Enhancement techniques may be required. Any prints collected will need to be compared to comparison prints supplied. Participants will be provided with a number of paper-based items.	April 2020	May 2020	July 2020	September 2020
2020-4	Chemical Criminalistics – Fibres	A break in and robbery occurred at a private home. Access was gained by breaking a window. Clothing from a number of suspects has been seized. Participants will be provided with samples of fabric collected from the broken glass and samples of the suspects' clothing.	May 2020	June 2020	August 2020	October 2020
2020-5	Document Examination	A document has been located and seized by Police investigating a corruption allegation. The person whose signature is on the document denies signing it. The disputed and specimen signatures will be provided to participant laboratories, with a request to provide investigators with any information regarding the signature and whether it is genuine. Participants will be provided with a number of high-quality images of the documents and signatures to examine.	June 2020	July 2020	September 2020	November 2020
2020-6	Chemical Criminalistics - Glass	A break in and robbery occurred at a private home. Access was gained by breaking a window. Clothing from a number of suspects has been seized. Participants will be provided with samples of the glass from the scene and the debris collected from the suspects' clothing.	July 2020	August 2020	October 2020	December 2020
2020-7	Forensic Biology – Biological examination, BPA and DNA	Following the assault described in 2020-2, a number of suspects have been located. Participants will be provided with the clothing of the victim and of the suspects.	August 2020	September 2020	November 2020	January 2021

Test ID	Discipline and subdiscipline	Summary of the Scenario	Last date for orders	Distribution	Results submitted	Final Report distributed
2020-8	Chemical Criminalistics – Architectural Paint	Entry to an unoccupied beach house was gained by jimmying the backdoor. Both the door frame and the paint were damaged. Tools were collected from a number of persons known to police. Participants will be provided with samples of paint from the door frame and the tools and asked to determine if there is any possible nexus.	September 2020	October 2020	December 2020	February 2021
2020-9	Chemical Criminalistics – Ignitable fluid residue	A fire occurred in a residential dwelling. A sample of the carpet was collected as the burn patterns indicted that it may have been deliberately lit. Participants will be provided with the sample of carpet.	October 2020	November 2020	January 2021	March 2021
2020-10	Forensic Biology – Biological examination and DNA - 2	The complainant had been allegedly assaulted by an unknown number of assailants. Participants will be provided with the clothing of the complainant and the suspects.	November 2020	December 2020	February 2021	April 20121
Interlaboratory Collaborative Trials						
2020-11	Forensic Palynology	Examination of botanical material adhering to plastic packaging of blocks of illicit drugs. Participants will be provided with tape lifts from the packaging.	February 2020	March 2020	May 2020	July 2020
2020-12	Digital Forensics	Examination of material stored in the ‘Cloud’ and comparison with material on seized computers.	May 2020	June 2020	August 2020	October 2020
2020-13	Forensic Drug Analysis	Examination of chromatographs produced following the analysis of a number of unknown compounds located in an alleged Clandestine Laboratory.	August 2020	September 2020	November 2020	January 2021
2020-14	Forensic Odontology	Examination and comparison of dental material.	October 2020	November 2020	January 2021	March 2021

2020 Program in detail

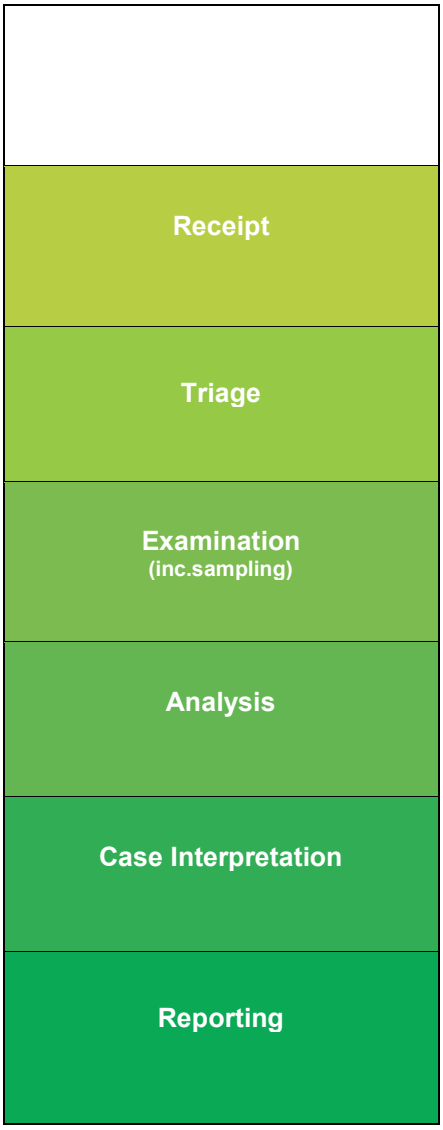
2020-1 Forensic Biology – Biological examination and DNA - 1

Scenario

A female complainant has been sexual assaulted.
Participants will be provided with the complainant's medical samples and reference sample.
Reference samples will also be provided from the suspects.

Last date for orders	February 2020
Distribution	March 2020
Results submitted	May 2020
Final Report distributed	July 2020

The following aspects of the forensic process will be examined:



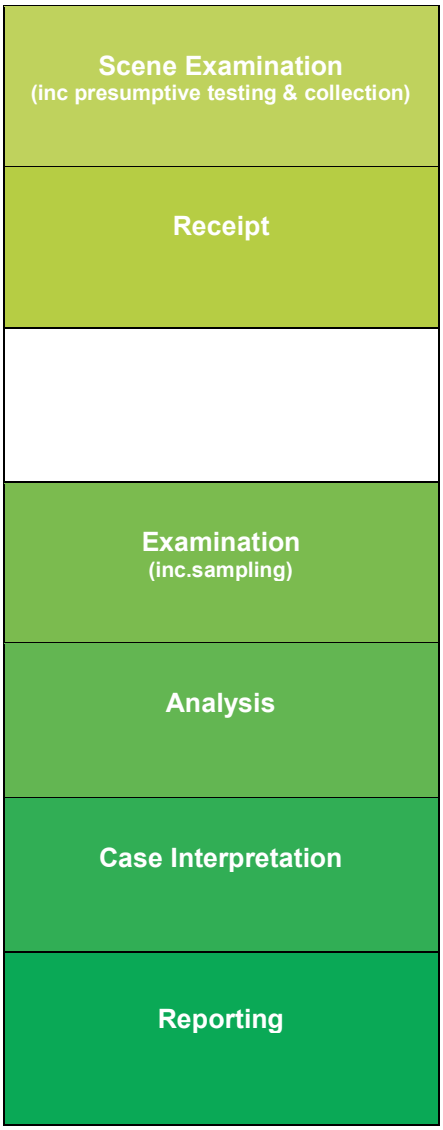
2020-2 Biology / Crime Scene Examination

Scenario

An elderly man attended the emergency department with lacerations to his head and face. He has no recollection of how the injuries were sustained. A property is located which may be the scene of the assault. Is the blood staining at this property consistent with the injuries sustained?
Participants will be provided with a detailed description of the injuries and photographs of the scene.

Last date for orders	March 2020
Distribution	April 2020
Results submitted	June 2020
Final Report distributed	August 2020

The following aspects of the forensic process will be examined:



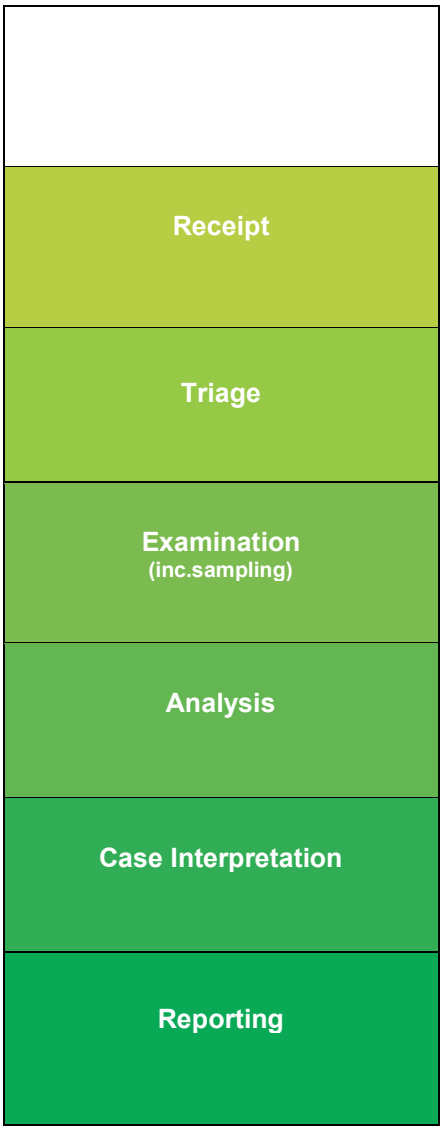
2020-3 Fingerprint detection, enhancement and identification

Scenario

Items collected from the crime have been submitted for fingerprinting. The participant laboratory will be asked to examine the items for any latent fingerprint present. Enhancement techniques may be required. Any prints collected will need to be compared to comparison prints supplied.
Participants will be provided with a number of paper-based items.

Last date for orders	April 2020
Distribution	May 2020
Results submitted	July 2020
Final Report distributed	September 2020

The following aspects of the forensic process will be examined:



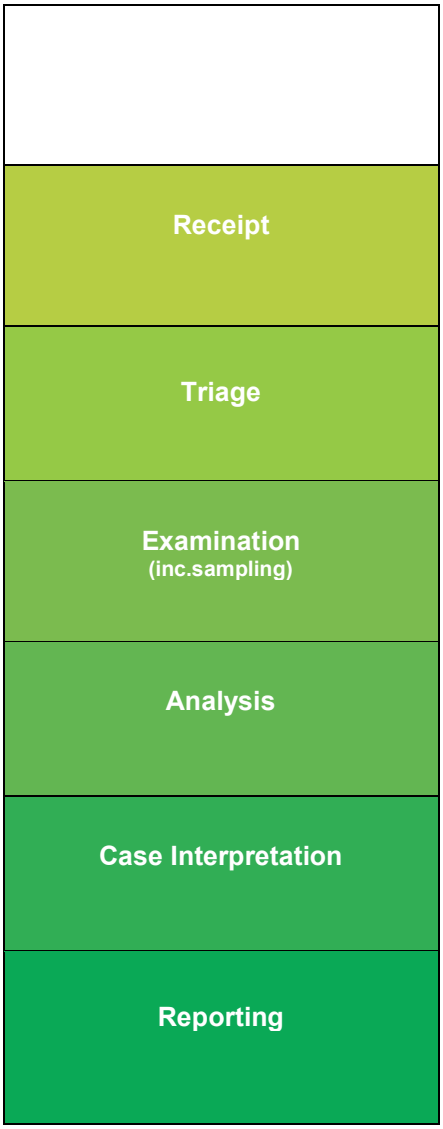
2020-4 Chemical Criminalistics – Fibres

Scenario

A break in and robbery occurred at a private home. Access was gained by breaking a window.
Clothing from a number of suspects has been seized.
Participants will be provided with samples of fabric collected from the broken glass and samples of the suspects' clothing.

Last date for orders	May 2020
Distribution	June 2020
Results submitted	August 2020
Final Report distributed	October 2020

The following aspects of the forensic process will be examined:



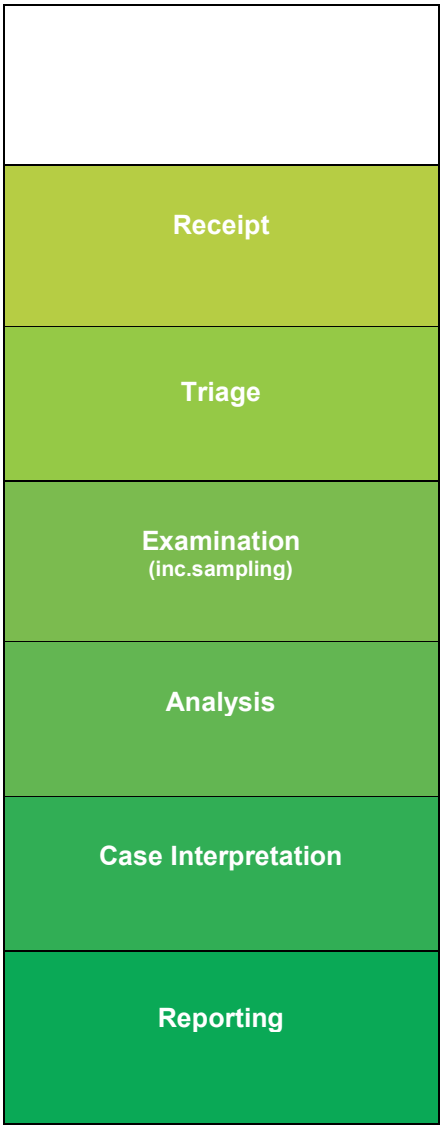
2020-5 Document Examination

Scenario

A document has been located and seized by Police investigating a corruption allegation. The person whose signature is on the document denies signing it. The disputed and specimen signatures will be provided to participant laboratories, with a request to provide investigators with any information regarding the signature and whether it is genuine. Participants will be provided with a number of high-quality images of the documents and signatures to examine.

Last date for orders	June 2020
Distribution	July 2020
Results submitted	September 2020
Final Report distributed	November 2020

The following aspects of the forensic process will be examined:



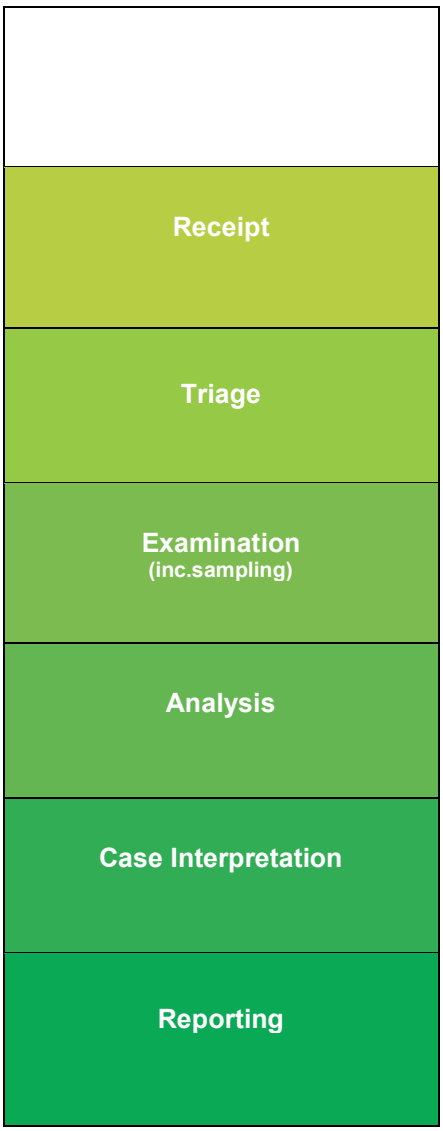
2020-6 Chemical Criminalistics - Glass

Scenario

A break in and robbery occurred at a private home. Access was gained by breaking a window.
Clothing from a number of suspects has been seized.
Participants will be provided with samples of the glass from the scene and the debris collected from the suspects' clothing.

Last date for orders	July 2020
Distribution	August 2020
Results submitted	October 2020
Final Report distributed	December 2020

The following aspects of the forensic process will be examined:



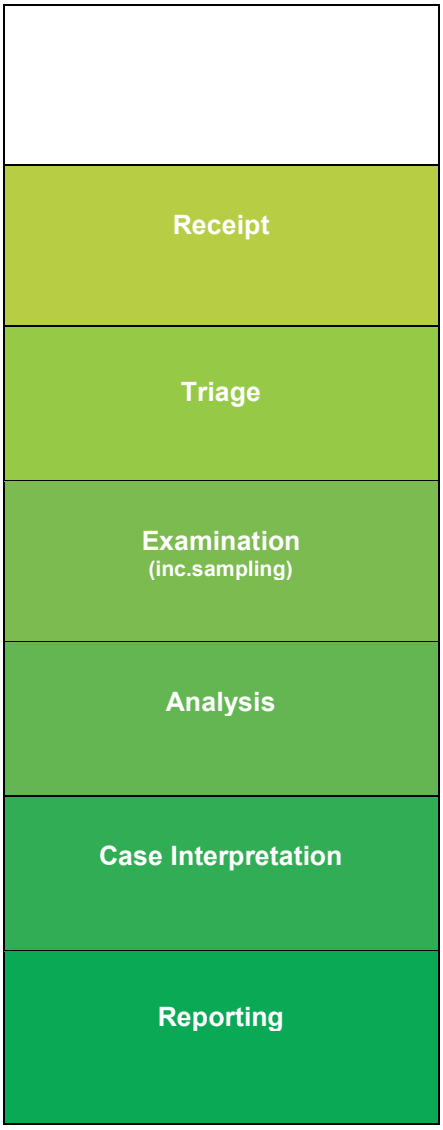
2020-7 Forensic Biology – Biological examination, BPA and DNA

Scenario

Following the assault described in 2020-2, a number of suspects have been located.
Participants will be provided with the clothing of the victim and of the three suspects.

Last date for orders	August 2020
Distribution	September 2020
Results submitted	November 2020
Final Report distributed	January 2021

The following aspects of the forensic process will be examined:



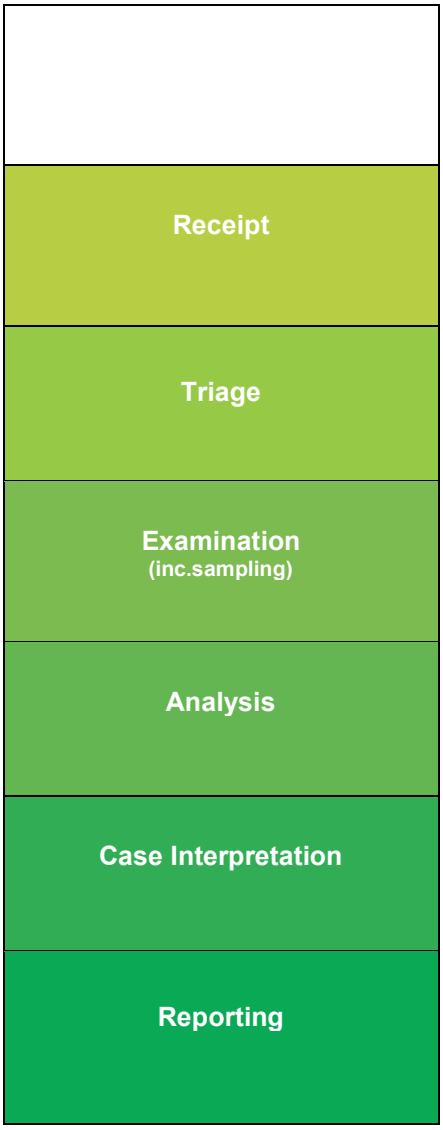
2020-8 Chemical Criminalistics – Architectural Paint

Scenario

Entry to an unoccupied beach house was gained by jimmying the backdoor. Both the door frame and the paint were damaged. Tools were collected from a number of persons known to police.
Participants will be provided with samples of paint from the door frame, the tools collected for examination and possible comparison of any paint found to the reference sample.

Last date for orders	September 2020
Distribution	October 2020
Results submitted	December 2020
Final Report distributed	February 20201

The following aspects of the forensic process will be examined:



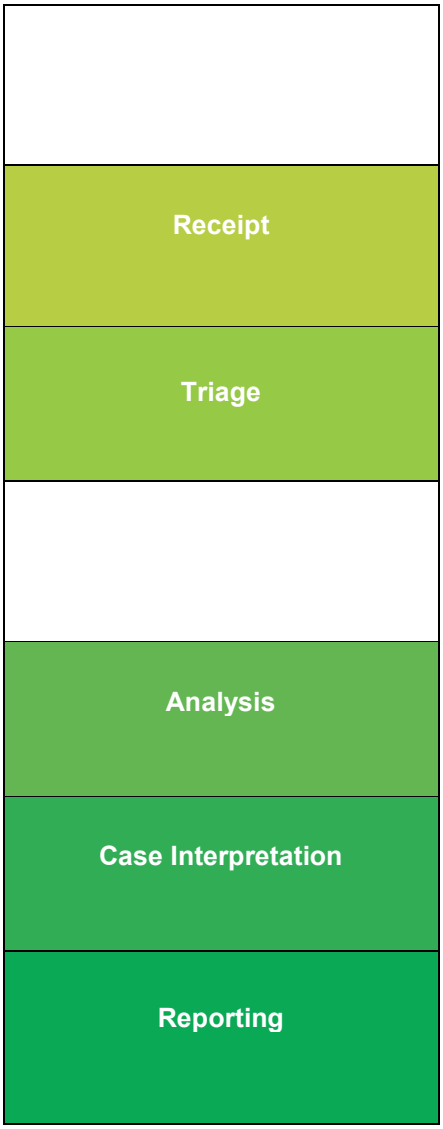
2020-9 Chemical Criminalistics – Ignitable fluid residue

Scenario

A fire occurred in a residential dwelling.
A sample of the carpet was collected as the burn patterns indicted that it may have been deliberately lit.
Participants will be provided with the sample of carpet.

Last date for orders	October 2020
Distribution	November 2020
Results submitted	January 2021
Final Report distributed	March 2021

The following aspects of the forensic process will be examined:



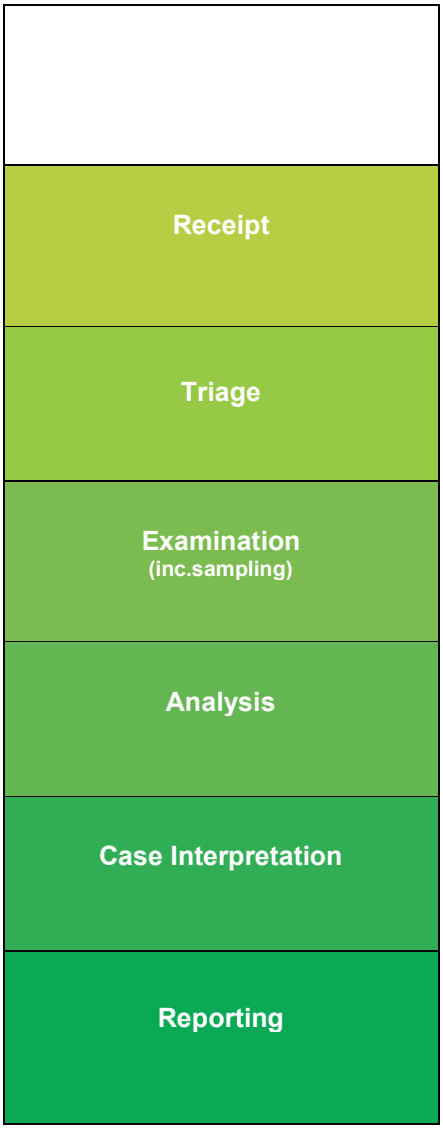
2020-10 Forensic Biology – Biological examination and DNA - 2

Scenario

The complainant had been allegedly assaulted by an unknown number of assailants.
Participants will be provided with the clothing of the complainant and the suspects.

Last date for orders	November 2020
Distribution	December 2020
Results submitted	February 2021
Final Report distributed	April 2021

The following aspects of the forensic process will be examined:

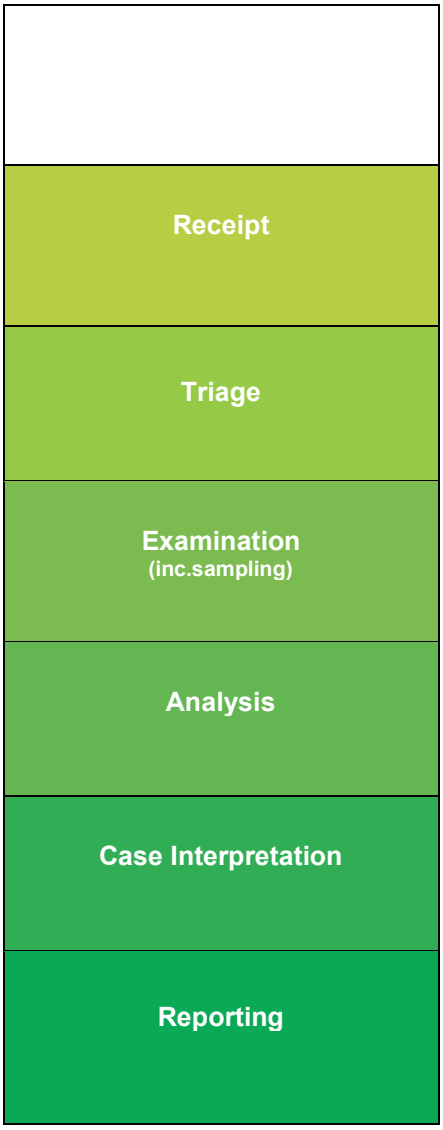


Scenario

Examination of botanical material adhering to plastic packaging of blocks of illicit drugs. Participants will be provided with tape lifts from the packaging.

Last date for orders	February 2020
Distribution	March 2020
Results submitted	May 2020
Final Report distributed	July 2020

The following aspects of the forensic process will be examined:



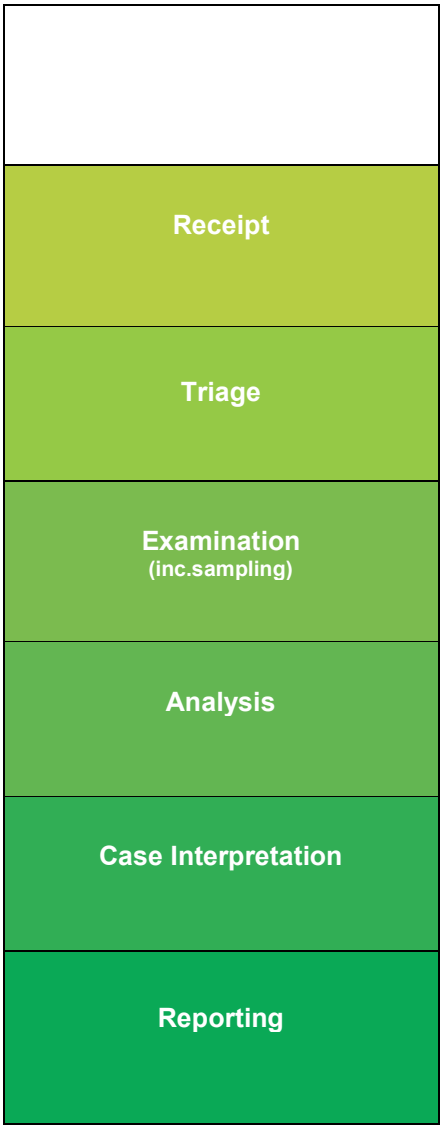
2020-12 Digital Forensics Inter-laboratory collaborative trial

Scenario

Examination of material stored in the 'Cloud' and comparison with material on seized computers.

Last date for orders	May 2020
Distribution	June 2020
Results submitted	August 2020
Final Report distributed	October 2020

The following aspects of the forensic process will be examined:



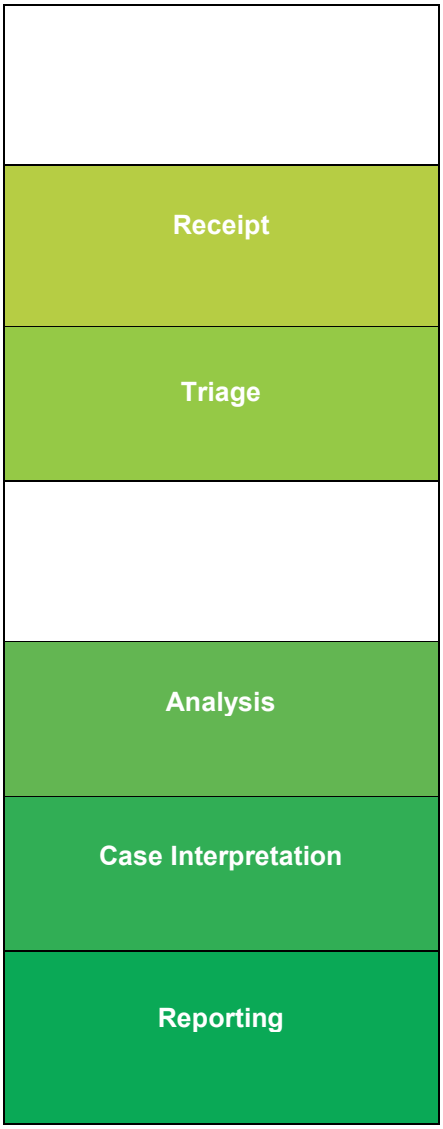
2020-13 Forensic Drug Analysis Inter-laboratory collaborative trial

Scenario

Examination of chromatographs produced following the analysis of a number of unknown compounds located in an alleged Clandestine Laboratory.

Last date for orders	August 2020
Distribution	September 2020
Results submitted	November 2020
Final Report distributed	January 2021

The following aspects of the forensic process will be examined:



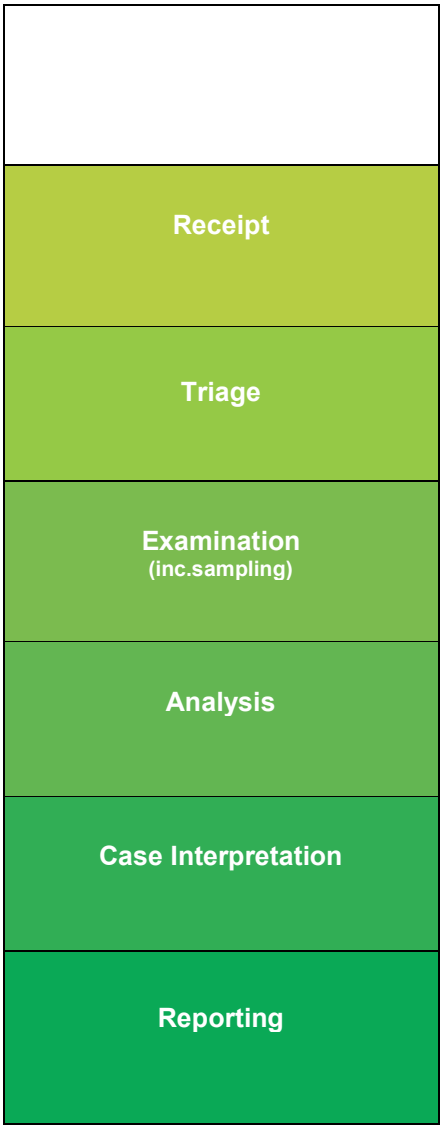
2020-14 Forensic Odontology Inter-laboratory collaborative trial

Scenario

Examination and comparison of dental material.

Last date for orders	October 2020
Distribution	November 2020
Results submitted	January 2021
Final Report distributed	March 2021

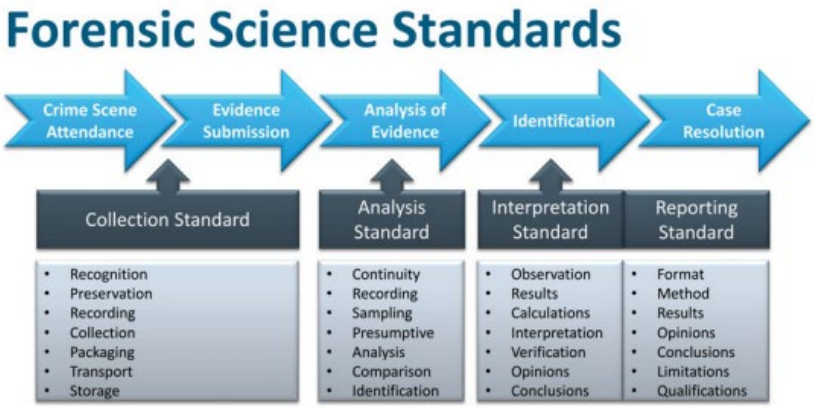
The following aspects of the forensic process will be examined:



Appendix A

<table>
<tr><th>Phase</th><th>Internal context
(Risk to organization)</th><th>External context
(Risk to clients inc. justice system and community)</th></tr>
<tr><td>Scene / laboratory examination (inc. presumptive testing and collection)</td><td rowspan="5">Continuity
transcription errors
issues relating to sealing of items
incorrect descriptions
sample mix up misidentification
Examination / analysis
samples not identified or incorrectly identified
samples not collected for testing
inappropriate examination / analytical method used
Interpretation / reporting
invalid or unsupported assumptions
contextual bias
incomplete</td><td rowspan="5">Absence of results where samples have not been collected / analysed
False identification of substance / false inclusions
False exclusion
Results deemed inadmissible
Incorrect weight given to evidence
Miscarriages of justice</td></tr>
<tr><td>Receipt in organisation or individual work unit</td></tr>
<tr><td>Triage</td></tr>
<tr><td>Analysis</td></tr>
<tr><td>Case Interpretation</td></tr>
<tr><td>Reporting</td></tr>
</table>

Appendix B



James Robertson, Karl Kent& Linzi Wilson-Wilde (2013) The Development of a Core Forensic Standards Framework for Australia, Forensic Science Policy & Management: An International Journal, 4:3-4, 59-67.

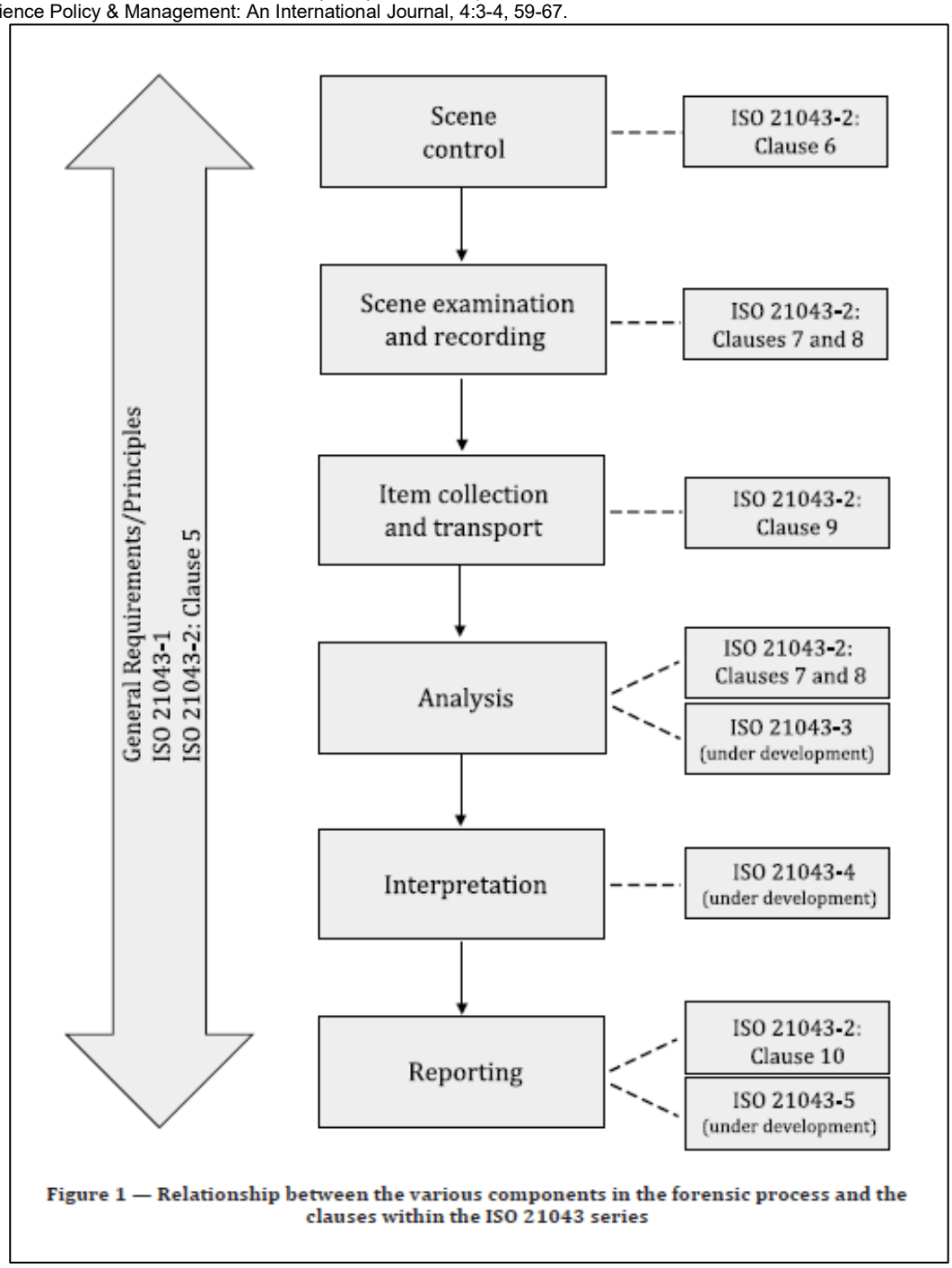


Figure 1 — Relationship between the various components in the forensic process and the clauses within the ISO 21043 series

Appendix C

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www.forensicfoundations.com.au

ABN 23 839 112 155 ACN 130 236 618

Forensic Foundations' Proficiency Tests are required to be fit-for-purpose. To assist us to provide the relevant fit-for-purpose tests, please use the following form to suggest further tests for development.

Recommendation for Proficiency Test development

Contact	Name	
	Email	
	Phone	
Discipline/ subdiscipline		
Specific issues(s) to be addressed*. Note: The tests can be designed to be multidisciplinary.		
Suggested technical advisor (if known)		
Suggested manufacturer (if known)		

* All Proficiency Tests will include the end-to-end process (receipt & continuity, triage, description, examination, analysis, data generation, interpretation, reporting) but one aspect may be of particular interest/focus.

This form can be emailed to quality@forensicfoundations.com.au or you can discuss your suggestions on either +61 3 9018 8919 or +61 429 966 012.