



## Component Standard Forensic Archaeology

### **Purpose**

To ensure that students are provided with the necessary information to develop an understanding of the theory and application of archaeology as routinely used in forensic science practice.

### **General Outcomes**

#### **The course should be designed to enable the student to:**

1. demonstrate the application of archaeology methodology to the search and excavation of a range of buried or concealed human remains or buried objects (firearms, weapons, drugs, etc) within a legal context;
2. explain how Forensic Archaeology can contribute to an investigation both in terms of intelligence and evidence and explain the difference between the two;
3. explain the advantages and limitations of different search techniques applied to the detection of clandestine burial of human remains and other materials (e.g. firearms, weapons, drugs etc.). These should include aerial imagery, search dogs and geophysics;
4. demonstrate by digital and non-digital means the ability to excavate, record, plan and draw sections rapidly;
5. explain the role of photography in recording crime scenes, including the role of scales and scene markers;
6. demonstrate a familiarity with a range of written recording methods including contemporaneous notes, context recording sheets, skeletal recording forms etc.;
7. demonstrate familiarity with application of electronic and conventional methods of survey including single station and 3D laser scanning;
8. demonstrate a detailed understanding of the decay processes associated with the human body under a range of different depositional environments:
  - a. explain the factors that will promote or retard soft tissue decomposition;
  - b. explain the implication that this will have for search strategies employed and the recovery of associated evidence;
9. demonstrate a basic knowledge of human skeletal components and their anthropological significance:
  - a. demonstrate familiarity with skeletal terminology;
  - b. demonstrate the basic differences between human and other mammalian skeletal elements;
  - c. explain the differences of role and expertise of Forensic Archaeologist, Forensic Anthropologist and Forensic Pathologist;
10. explain the broad conclusions regarding selection of body disposal sites based upon studies of offender behaviour;

11. demonstrate understanding of landscape, soils and factors which dictate the selection of deposition sites:
  - a. explain how to make an assessment in the field and what knowledge of resources is needed in order to make a pre-operational assessment;
12. demonstrate the application to search of the following techniques:
  - a. terrain modelling;
  - b. GIS (Geographical Information Systems);
  - c. use of maps and aerial imagery to document changes to landscape through time (e.g. changes to tree line etc.) as an aid to the interpretation witness statements in historic inquiries;
13. explain the principles of archaeological stratigraphy:
  - a. explain the requirements to be able to record stratigraphy to an established professional standard;
  - b. demonstrate how to be able to communicate the implications of recorded stratigraphy in a comprehensive manner to the Court;
  - c. demonstrate a clear understanding of stratigraphy applied to complex sites, including mass burials or interments in already complex structure/deposits;
14. during the course students should have participated in a range of simulated exercises (focused on both search and excavation) using a range of different scenarios and different depositional environments;
15. demonstrate an understanding of the operational & methodological differences between criminal (usually single graves) and post-conflict investigations (often, but necessarily always mass graves) and legislative frameworks that underpin this work;
16. demonstrate an understanding of the archaeological and analytical approaches to the investigation and elucidation of transit graves, secondary burials, and 'no body cases' where a body has partially decayed and been subsequently moved;
17. explain the relevance of contamination avoidance procedures and give examples in relation to the location, extraction and analysis of contact trace material;
18. demonstrate an awareness of the roles, responsibilities and liabilities of all personnel involved in the working of a dig with particular emphasis on police scientific support personnel such as Scenes of Crime Officers, the Senior Investigating Officer (SIO), Crime Scene Manager, pathologist and other police personnel or their equivalents.