Forensic Archaeology to Maximize Evidence Recovery

Agenda:

DAY 1
9.30am – Session 1
10.30am – Session 2
12noon – lunch
12.30pm – Session 3
1.00pm – Session 4
3.30pm – break
4.00pm – Session 5
5.00pm – End of Day 1

DAY 2
9.30am – Session 6
10.30am – Session 7
12.00noon - lunch
12.30pm – Session 7 con’t
2.30pm – break
3.00pm – Session 8
5.00pm – End of Day 2

Session Descriptions:

1. Welcome, Course overview, Useful resources, Group discussions
This session will provide an introduction to the course and the expectations of both the instructor and participants. A number of useful forensic resources will be covered such as key texts, organizations, online databases, and networking sites. The course will officially start with group discussion of participants’ experiences of human remains recovery.

2. Forensic Archaeology: theory & practice
This session will cover the protocols, procedures, and the theoretical framework that govern forensic archaeology. We will cover how a forensic archaeologist aids in search and location, approaches a crime scene, and excavates a grave ensuring that the maximum about of information is recovered.

3. Search & Location
When it comes to disposal of human remains, the driving motivation is “ease & speed”. This session will cover some of the predictable behaviors of suspects that can help guide search and location efforts.

4. Field exercise – part 1
Our field exercise will begin with the search and location of our crime scene. Participants will be introduced to the scenario and provided with a map of the local area. Once a potential location has been identified, we will conduct a search to locate the scene. The scene will be cordoned, observations will be made, and documentation begun. We will discuss our strategy for processing the scene.
5. Environmental Profiling
Although a new addition to the forensic tool kit, environmental evidence has seen a dramatic increase in use recently. Soil, plant remains, and pollen are the “fingerprints” of an outdoor scene and provide useful clues to the investigator. This session will cover the basic principles behind soil & pollen analysis and environmental profiling. Time permitting, we will also discuss forensic entomology.

6. Recap of Day 1, group discussion
The methodology for excavation, documentation, and evidence recovery will be reviewed. We will discuss the previous day’s experience and set out to process our scene.

7. Field exercise – part 2
In this session, we will process the outdoor scene identified in Session 4 and excavate any remains. All activities will be documented. We will conduct the field exercise as close to “real life” as possible.

8. Wrap up, debrief, expert testimony, mass fatality incidents
The first half of this session will allow participants to review the field exercise and form some conclusions as to the human activity that took place there. The second half of the session will discuss the role of forensic archaeology in court and the sort of expert testimony an archaeologist can provide. Finally, we will very briefly discuss some elements of mass fatality incidents and the role archaeology can play.

Forensic Evidence Addressed:
- Fingerprinting
- DNA Profiling
- Odontology
- Anthropology
- Mineralogy
- Environmental Profiling
- Entomology
- Palynology (Pollen)
- Archaeology
- Trace evidence

Forensic Protocols:
- Crime Scene Examination
- Documentation
- Human Remains Recovery
- Evidence Integrity

Expert Testimony:
- Statistical Analysis
- Impartiality
- Creating a Narrative
- Expert Opinion vs Fact
- Avoiding Common Errors

Learning Goals:

1. Competence:
a.) Theory. Participants who complete the forensic archaeology training program should understand and be able to articulate, both orally and in writing, the core theoretical concepts that form the foundation of forensic archaeology today. Core concepts are derived from traditional archaeological methodology and include excavation techniques, documentation techniques, stratigraphical
interpretation, and artifact recovery.

b.) **Practice.** Participants who complete the forensic archaeology training program should understand how an outdoor scene should be processed using archaeological methods and how human remains should be excavated to ensure optimal evidence recovery.

c.) **Research Methods.** Participants who complete the forensic archaeology training program should be familiar with the tools, techniques, and data sources necessary for empirical analysis of environmental evidence. Participants should understand the various ways that environmental evidence is used in forensic science. They should know who to turn to for the analysis of soils, pollen, and arthropods.

2. **Critical Thinking:** Upon completion of the forensic archaeology training program participants should be able to apply their understanding of core concepts and practical tools to real world casework, evaluate current crime scene processing procedures for outdoor scenes and clandestine grave excavation, and assess the practicality of utilizing environmental evidence.

3. **Scholarship:** Interested participants should have an opportunity through such avenues as additional training sessions, continuing education programs, collaborative relationships, and faculty interactions to conduct independent research on matters of central relevance to their professional roles and expertise.