

Physical Anthropology Section – 2003

H52 Teaching Forensic Archaeology to the Masses: The Death Scene Course at Mercyhurst College After a Decade

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Attendees can expect to learn more about courses offered in the field of forensic archaeology. Curricula offered, justification and objectives of these courses, faculty, and primary audiences will be detailed.

For the past 11 years, on an annual basis, the Mercyhurst Archaeological Institute (MAI), Mercyhurst College, Erie, PA, has presented an annual 6 day short course in forensic archaeology entitled "Death Scene Archaeology: Field Methods in the Location, Recovery and Interpretation of Human Remains from Outdoor Contexts." As currently configured, the short course represents the only international multi-day seminar devoted exclusively to the presentation of current methods in the field of forensic archaeology. In this presentation, an overview of the short course will be given along with a discussion of original goals and objectives, prospective audience, faculty, curriculum, and offspring courses.

Goals and Objectives of the Course: The primary objective of this introductory course is to expose participants to the field of forensic archaeology by describing the range of activities typically involved in the discipline, explain the basic principles and methods of the field, and present—through case studies—the benefits derived from employing these techniques in terms of maximizing physical evidence location, documentation and collection. This is accomplished through lecturebased presentations that are strongly supplemented with hands-on opportunities to experience some of the techniques discussed. It should be noted that a small percentage of the participants, especially active law enforcement investigators, can immediately incorporate some of these methods into their everyday work (or at least know where to find expertise); however, most participants require much more education and training in archaeology, forensic anthropology, and forensic science and/or law enforcement. At the beginning of each short course it is strongly emphasized that these and other short courses and seminars provide one of a multitude of contributions to the entire educational package of the forensic anthropologist.

Audience: The participants typically include advanced undergraduate and graduate students in anthropology departments throughout North America and Canada, law enforcement officials at the local, state, and federal agencies, coroners, medical examiners and their deputies, forensic pathologists, and administrators from public and non-profit research foundations. To date individuals from 39 states, Puerto Rico, Spain, the Netherlands, South Africa, and Columbia, have participated. There are currently only a very limited number of forensic anthropology courses available to undergraduates beyond an introductory course, and even fewer, programs of study in the field. For the advanced undergraduate student, this course offers a rare opportunity to gain insight into an area of anthropology that has recently generated much interest. At the graduate student level, few graduate programs provide courses or a portion of the curriculum to forensic archaeology. Individuals in law enforcement are particularly interested in courses that will improve their data collection methods at outdoor scenes, areas of investigation that are typically not addressed adequately during basic training regimes.

Curriculum and Faculty: The curriculum focuses on the location and processing of a variety of outdoor scenes including surface scatters of human remains, buried body features, fatal fire scenes and mass fatality localities. The faculty includes board-certified forensic anthropologists, an FBI agent who also heads an evidence response team, professional archaeologists, a board-certified forensic entomologist, and crime scene specialists. Following an introduction to the subject of forensic anthropology, more detailed lectures regarding archaeological principles as they apply to the crime scene are presented. This is followed by lectures and demonstrations relevant to the search for unlocated crime scenes, addressing topics such as the role of the cadaver dog, probing techniques, and pedestrian searches. Next, techniques used to create precise topographic, plan-view and profile maps are discussed followed by practical exercises that require the mapping of the surface distribution of physical evidence. Forensic entomological lectures and demonstrations of proper insect collection methods using white-tailed deer carcasses are also emphasized at this time.

The remaining three days of the course are devoted to the proper excavation of the buried body feature, which in this case, involves mock burials containing plastic human skeletal elements and other physical evidence arranged in a particular burial context scenario. More sophisticated methods of burial location involving geophysical instrumentation such as the EM-31 and ground-penetrating radar have recently been added to the curriculum. Following brief experimentation a few years ago with human cadavers and animal carcasses, it was determined that attention had shifted to the repulsive factor of the physical evidence, and away from the intended primary focus; the employment of exacting excavation methods that maximize evidence documentation and collection procedures. The use of decomposing biological specimens in the grave feature was abandoned.

Offspring Courses: Recently, two programs were added to the Mercyhurst training repertoire that represent direct descendants of the Death Scene course; a week-long short course in Death Scene Investigation presented in the town of Taramundi, Asturias, northern Spain, covering the basics of forensic anthropology, and a two-week intensive field school in forensic archaeology which expands the complexity of recovery scenarios as compared to the week-long course and also requires a written report of activities.

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In 1998, the Federal Bureau of Investigation's St. Louis Division Evidence Response Team first sponsored a five-day short course modeled after that developed by MAI. "Crime Scene Archaeology: A Field Training Program in Forensic Archaeology and the Recovery of Human Remains," was offered exclusively to medico-legal death investigators as advanced training. Recently, the course was accredited by the Missouri Police Officers Standards and Training (POST) board and the American Board of Medicolegal Death Investigators for continuing education certification. Attendees for the tuition-free course are selected, in part, on the basis of years experience in crime scene investigation.

Like the Mercyhurst course, the St. Louis seminar serves to introduce investigators to the wide array of disciplines required for a thorough examination and reconstruction of outdoor crime scenes. Divided into two days of lectures, one day of round-robin format mapping exercises, and two days of recovery practicals, the course was designed to mimic as closely as possible true crime scene investigations. Federal, state, and local public safety and private resources such as helicopters, fire department aerial platforms, cadaver dog teams, total station mapping teams, and geophysical engineers were incorporated into a multiple homicide/buried body scenario addressed by half the class and a small airplane crash scenario addressed by the other half. The course intentionally includes long hours, night sessions, and mandatory team assignments which mixed investigators from different departments, in order to create an atmosphere much like that encountered during a true major case-task force type investigation. One noted benefit of the course has been the tendency for attending departments to call on outside expert assistance in real cases while conducting appropriate site preparations prior to the arrival of that assistance.

Another offspring course closely modeled after the Mercyhurst Death Scene course is presented by the York Regional Police Department in York, Ontario. Like the FBI course described above, the primary intended audience is local and regional law enforcement investigators and serves to introduce the discipline and raise the level of expertise brought to bear on outdoor crime scenes in the region.

All of these courses have had a significant impact relative to exposing this under appreciated discipline to a wide audience both within anthropology/forensic anthropology and within the law enforcement community at the local, state and federal levels.

Forensic Archaeology, Training Opportunities, Teaching