## ANT 686: Forensic Science, Forensic Anthropology & Forensic Archaeology Summer Field School.

In 2007, Dr. Samuel Stout – a forensic anthropologist in the Department of Anthropology - developed a forensic field school and offered it initially under an existing course <u>Anthropology 685</u>: <u>Summer Field School in Archaeology</u>. This endeavor was co-taught by a PhD candidate in forensics (Jules Angel) and former forensic photographer for Scotland Yard. The description of that course is as follows:

Practical experience in archaeological fieldwork including site survey, excavation, surveying and mapping, preservation, and other related methods and techniques of data recovery.

The field school has generated a good deal of positive attention and student interest; however, offering it under our existing ANT 685 heading has led to confusion as well. Typical archaeological field schools spend 5 – 10 weeks over several seasons surveying, mapping, excavating and cataloging a real archaeological site and producing real data. The goals of the forensic field school are quite different and include investigations of crime scenes using multiple forms of evidence and techniques: diagramming, mapping, photography, evidence collection, lab tests, case building and court testimony. The field school brings together multiple experts in Ohio (45 individuals from some 15 different organizations) and consists of 20 modules with a lecture followed by a hands-on portion where students apply newly acquired skills. The three week class covers basic crime scene management, spatial mapping and diagramming for inside and outside scenes; a cadaver dog demonstration on searching large areas for bodies or bone; photography and video documentation; DNA isolation and processing; the trigonometry involved in assessing blood spatter; toolmarks and ballistics; shoemarks and fingerprints; types of trace evidence and processing techniques; discussions with police officers, expert witnesses, and lawyers; processing an inside crime scene; attending an autopsy at the Coroners Office; recovering a body from a clandestine burial; basic human osteology and how to generate a biological profile from bones to help identify a victim; forensic entomology; mass incident management; criminal psychology; forensic pathology; Ohio law; and giving expert testimony in a Moot Court during cross examination.

The activities in this course diverge strongly from those typically covered in a traditional archaeological field school. For example, in 2008, four rooms in the soon to be demolished Lord Hall were altered to resemble a crime scene: glass was broken, fingerprints and shoe marks were left, blood (from a horse) was scattered and graffiti was sprayed. Teams were given a one page police brief that detailed what was known about the possible victims and who the suspect was. (There was also a potential link to some buried graves at Waterman Farms on West Campus.) The teams - as CSI's - were instructed to process the scene by applying knowledge obtained from lecture and other activities. They collected and packaged all the different types of evidence and completed a packet of forms to document the process for court. In addition, two and a half days were devoted to recovering a clandestine burial at Waterman farms with students working as forensic archaeologists. Students covered spatial relationships (between graves and with the graves and a fixed point), using Ground Penetrating Radar to find burials, employing various excavation techniques, completing evidence collection, and extensive documentation. Each team excavated a different victim drawn from a real life missing person's file available on the web, and each skeleton was dressed with clothing and accessories that matched that specific missing person.

Given the differences in content between an archaeological field school and our newly created forensic field school opportunity, we would like to offer the latter under a new course number accompanied by a more accurate description:

ANT 686: Forensic Science, Forensic Anthropology & Forensic Archaeology Summer Field School. An intensive forensic science survey course covering the many aspects of processing various types of crime scenes, collecting evidence, and developing a case for expert testimony in court. Taught by many different experts, this class incorporates chemistry, biology, physics, and earth and social sciences.