KRISTY HENSON, Dept of Natural Sciences, Forensic Science Program, Fairmont State University, Fairmont, WV, 26554. Using mammalian skulls to enhance undergraduate research on skeletal trauma in a forensic anthropology course.

Hands-on activities are favored learning techniques in STEM fields. In forensic anthropology courses, some of the content is hands-on but frequently is passive. Students typically observe bones, trauma, and post mortem intervals but rarely have the opportunity for active techniques such as reconstruction. It is unwarranted to demolish human remains to teach skeletal reconstruction, and digital reconstruction is challenging due to 3D technology's steep learning curve, but this information is important for students wishing to pursue careers in skeletal identification. The purpose of this pilot project was to incorporate other mammalian skeletons in place of humans and create an in-class research project relevant to forensic anthropology. Three deer skulls were acquired from local hunters. The specimens were thawed, skinned, flensed, and skeletonized using dermestid beetles. Skulls were inflicted with random trauma and presented to the students. In groups of two, students reconstructed their skull and identified all skeletal trauma, then presented a research poster to the class. Students answered survey questions at the end of the semester to assess their learning experience with 100% feeling they were more competent in the field of forensic anthropology. Pre and post exams showed that 50% of the students demonstrated a 7% grade increase.