

Beyond the body farm: Building a campus-based outdoor forensic lab

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Abstract: This paper describes the development and implementation of a designated outdoor forensic laboratory at Texas A&M University—Central Texas (TAMUCT) and explores its integration into the university's forensic science curriculum. One of the persistent challenges in forensic education is the lack of accessible, sustainable spaces for conducting realistic crime scene simulations. To address this, we established a permanent outdoor lab designed specifically for educational use, allowing students to engage in hands-on, scenario-based training that supports our active learning model. Distinct from body farms and indoor crime scene houses, the outdoor lab offers versatility for mock crime scenes, burial simulations, and other investigative exercises in a realistic, controlled setting. We outline the process of selecting, equipping, and utilizing the lab space, including the basic criteria for site selection, essential infrastructure (e.g., shade structure, storage, signage), and the materials needed for long-term sustainability. The lab was developed with accessibility, functionality, and instructional goals in mind, and has supported both classroom learning and community engagement initiatives. We also provide recommendations for educators in small or resource-limited forensic programs interested in adopting outdoor lab spaces. This model may serve as a blueprint for institutions seeking to enhance experiential learning in forensic education through innovative and cost-effective solutions that promote interdisciplinary collaboration and long-term instructional continuity.

Keywords: Forensic education, Outdoor laboratory, Active learning, Crime scene simulations, Experiential learning

Introduction

Current research continues to support the use of high impact learning in the forensic sciences, specifically through the integration of realistic simulations, both live and virtual (1, 2). Simulation-based learning, including mannequins, props, or mock crime scenes, has been shown to be effectively teach and refine practical skills, enhance critical thinking, improve retention of course content, and provide students a chance to apply their knowledge in a realistic, hands-on setting (1). Along with an increased awareness in forensic science education of the importance of high impact practices, educators have implemented a range of crime scene simulation methods, including virtual simulations (3), crime scene houses (4, 5), and outdoor crime scene simulations (6, 7, 8). These projects, each with different benefits and limitations to students, are aimed at providing forensic science students with opportunities to apply skills and develop real-world problem solving and critical thinking abilities.

In our previous work, we provided a detailed overview of the development and implementation of simulated crime scenes in forensic education, representing over a decade of iterative refinement and instructional innovation at Texas A&M University—Central Texas (7).

As we have already provided an overview of the processes, active learning exercises, and challenges to creating crime scenes for undergraduate courses, those aspects are not repeated here. Instead, we focus on one of the major challenges we previously identified as an obstacle to implementing simulated crime scenes: lack of suitable and sustainable facilities (7).

In this paper, we focus on the development of a designated outdoor lab space and its value for forensic science educators seeking to incorporate realistic, sustainable simulations into their courses. Unlike outdoor forensic research facilities that focus on the study of taphonomic processes on human and animal remains (e.g., Texas State University and University of Tennessee Knoxville), we define an outdoor forensic lab as a designated outdoor learning environment where crime scene simulations or related outdoor training activities can take place. We describe the benefits, opportunities, and special considerations a designated campus outdoor space can offer to forensic science programs. Specifically, we detail the planning, design, and implementation of our lab at Texas A&M University—Central Texas, including the types of activities best suited for the space. Finally, we explore the potential for interdisciplinary collaboration

and community engagement through collaboration and outreach initiatives.

Forensic education facilities

Outdoor educational and training simulations in forensic sciences that focus on field work have used three general types of live facilities: 1) outdoor human decomposition research laboratories, commonly known as “body farms” (12, 13), 2) crime scene houses or vehicles which are used to simulate enclosed crime scenes (4, 5), and 3) outdoor forensic laboratories, or designated outdoor areas for forensic education where decomposition studies are not the primary focus (6, 7, 8, 9). While decomposition research facilities offer unique research opportunities, they are less applicable to general educational settings. This paper focuses instead on simulation-based learning environments, both crime scene houses and outdoor forensic labs, that support hands-on forensic training and skill development for students in educational programs.

The Crime Scene house at Keele University in Keele, England, serves as a model for the use of dedicated facilities in forensic education (4). Designed to support the development of practical skills and methodological instruction, the house provides students with exposure to a variety of realistic crime scene scenarios. Its layout includes specialized rooms for blood pattern analysis, multiple staged scenes featuring mannequins and physical evidence to support complex, multi-room investigations, and an integrated remote monitoring system equipped with cameras, microphones, and speakers. This system enables students to work independently while being observed and guided by instructors from a separate control room. Additionally, the facility includes an outdoor area with a vehicle used for training in forensic vehicle searches. The comprehensive design of the Keele facility illustrates the pedagogical value of simulation-based learning environments and suggests how outdoor forensic labs can complement indoor training spaces by expanding the scope and realism of simulated investigative activities.

Woolridge and Bailey (5) provide another example of how crime scene houses can be used to support forensic science education through large-scale, interactive events. At the University of Texas at Tyler they organized a campus-wide mock crime scene event titled *Murder Mystery at UT Tyler*. Initially, a small, manufactured home was temporarily donated for classroom simulations in 2021; however, its limited size rendered it unsuitable for broader event use. Subsequent efforts to obtain funding for a larger, permanent facility were met with logistical challenges, particularly in securing campus space for such a structure. As an interim solution, a larger manufactured home was donated in 2022 and used successfully for the event. Their work illustrates both the

instructional value of immersive simulations, and the ongoing barriers institutions face when attempting to establish permanent infrastructure for forensic education. The authors emphasize the importance of aligning university events with academic program objectives while acknowledging the limitations imposed by a lack of dedicated outdoor forensic training spaces. Outdoor spaces offer significant versatility for forensic education, particularly in the creation of varied and realistic training simulations. There are many benefits to working outside, including (1) the ability to replicate complex real-world environments including real-life challenges, (2) allowing for activities requiring ventilation or debris accumulation and (3) allowing for novel experiential learning opportunities that go beyond the traditional classroom (7). Rubins (8) details the use of mock crime scenes as final exams for undergraduates, illustrating the utility of outdoor spaces. The simulations used were based upon real crimes and were designed to be worked outdoors near campus where students process the scenes with equipment provided by the instructor (8). Scene types included an abandoned vehicle, a body on a hill, a body in a drain, a robbery-homicide, an attempted abduction-homicide, and a simulated hunting accident.

Crime scenes are also available virtually, as the University of Nebraska-Lincoln Crime Scene 360 tour website illustrates, where seven interactive virtual crime scenes are shown with accompanying activities such as labs in toolmark analysis and forensic entomology (9). The virtual tour structure allows students to explore crime scenes remotely, which is an ideal option for hybrid or fully online courses, improving accessibility. University of Nebraska-Lincoln forensic science educators Bauer et al. (2023) have also described small scale activities such as forensic entomology modules that use common grocery items (10) with resources and materials available in an open access entomology guidebook that can be used to design activities (11). Outdoor activities such as this one are ideal as part of stations that can be created in an outdoor lab, highlighting their versatility for both large and small programs. Taken together, the diversity of scenes and activities utilized at forensic education facilities today illustrates the pedagogical value and realism that outdoor forensic labs can offer when thoughtfully implemented.

Methods

Texas A&M University Central Texas is an upper-level only university located near Fort Hood in Killeen, Texas. There are approximately 2,400 students enrolled as of 2025, many of which are non-traditional or military affiliated. The outdoor forensic lab is associated with the Criminal Justice and Anthropology programs under the Department of Social Sciences within the College of Arts and Sciences. Social Sciences class sizes range between

12 and 24 students. Before the establishment of a designated outdoor forensic lab, conducting crime scene simulations posed recurring logistical challenges. Each semester, we were required to request or negotiate access to temporary outdoor areas on campus, with usage limited to the specific timeframe of a course. While we had a set of basic criteria, we used to select temporary sites (TABLE 1) it was difficult to ensure that all criteria were met every semester. Previously used sites were sometimes rendered inaccessible due to fencing, landscaping changes, or increased campus activity. Essential features, such as shade, accessibility, or open space, were not always available. The impermanence of these arrangements created instability in course planning and limited opportunities for sustained or cumulative learning experiences. Without a designated space, each semester involved rebuilding the infrastructure and setup from scratch, hindering the program's ability to evolve or expand.

TABLE 1 Forensic outdoor lab logistical considerations.

<u>Selection criteria for outdoor crime scene simulation location</u>
<ul style="list-style-type: none">• On campus• Accessibility accommodations• Ability to create versatile and authentic crime scene simulations• Depth of soil for mock burials• Has an area of open space (to arrange equipment and teams, or for open scenes)• Free of excessive vegetation (ease of use)• Shade or cover (to provide relief from weather)• Limited foot traffic (if desired)• Proximity to campus facilities (safety, storage, utilities, restrooms)• Does not disturb existing campus use, landscaping, etc.
<u>Optional Materials for a long-term sustainable outdoor lab</u>
<ul style="list-style-type: none">• Signage• Permanent shade structure to provide cover from weather• Storage building• Concrete area, ideally under the structure, where we can set up tables safely• White board to display educational items• Water supply• Power (generator)

As crime scene simulations gained popularity and became a recurring component of our curriculum, we gradually accumulated the equipment and materials necessary to support increasingly complex scenarios. It became increasingly apparent that the constant movement and reevaluation of location was not sustainable. We began pursuing a long-term solution in the form of a dedicated outdoor forensic lab. At many system-affiliated institutions, such as those within the Texas A&M or University of Texas Systems, securing a designated campus space is not a straightforward process. Official designation requires navigating formal administrative

channels and approvals, with space allocation typically governed by university leadership rather than faculty or academic departments. To advocate for our vision, we developed a presentation that outlined both the demonstrated success of prior simulations and the unrealized potential for programmatic growth if a permanent space were secured. A key argument emphasized the inefficiency of relocating each semester, and how sustained access to a single site would enable the gradual development of facilities and infrastructure, supporting continuity in instructional design. At a minimum, we prioritized identifying a space that would be accessible to all students, including those requiring accommodations—an essential consideration under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (14, 15). Beginning in Fall 2022, in collaboration with campus facilities staff, we evaluated available campus land and ultimately selected a site that met our instructional and accessibility needs and was not designated for other future development.

In Spring 2023 we were able to select an appropriate space on the university campus for the new outdoor forensic lab. The selected space is accessible to students in two ways. It is directly situated next to a parking area, so that students can park vehicles close to the site without needing to travel far or navigate to an isolated site. Additionally, there is an existing wide and smooth concrete pathway surrounding the entrance to the outdoor lab space area, so that students can safely approach the site. The entrance to the site itself is clear of vegetation, is flat and directly leads to a central meeting area. In Fall 2023 the site was officially designated. The first visible indication of the space's official designation was the installation of signage, signifying its permanent presence on campus.

Materials

After gaining access to the designated space in Fall 2023, we conducted our first set of simulations as part of a forensic science course. This initial use of the site allowed us to shift our focus from simply securing a location to evaluating the long-term needs of the outdoor forensic lab. Beyond meeting our basic selection criteria, we began to assess what additional infrastructure, materials, and logistical support would be necessary to ensure the lab's sustained effectiveness in supporting high-quality, realistic educational simulations. We wanted to establish not only a multipurpose space, but a lab that would allow us to create the most authentic and realistic simulations possible.

The first course that used the outdoor forensic lab included training on excavation techniques including mock burial simulations. During this course, we were able to use the site for an extended period of time with students to better understand what materials and/or

facilities would improve the experience and ensure its long-term sustainability. Thus, while having a bare area of land would have been the minimum possible criteria, to run simulations in a high quality and effective way into the future, we used this test run to develop logistical solutions to prevent continuing issues. We were able to achieve this by using the information obtained during activities on the site in late 2023 to plan the future use of spaces on the site (**FIGURE 1**), and to plan which purpose-selected additional materials would be needed at the site (**TABLE 1**).

We realized after our pilot class that selected areas on site would allow us to conduct many different types of activities, while still retaining the original outdoor atmosphere that we had relied on for many years. With a permanent space and customizable layout, a wider range of scenarios could become possible. Simulations can now incorporate open-air scenes, mock burials, water-adjacent body recovery setups, and staged evidence trails across varying terrain. By subdividing the space, multiple crime scenes can be run simultaneously, which is especially valuable for final practical exams or team-based assignments. Importantly, the ability to leave scene setups in place for several days has enabled more complex, multi-day exercises that would have been impossible in a temporary-use model.

FIGURE 1 denotes the different types of areas (A-E) which make up the outdoor lab, allowing us the most versatility possible in deciding what types of scenes and activities we can implement. We ensured that some areas had increased soil and vegetation cover to allow for mock burial simulations, while other open areas could simulate open scene types, such as when evidence or simulated human remains were arranged on the surface. We also planned for the most efficient use of the space when selecting where to place functional materials and structures, which included a storage unit, pavilion structure with concrete pad, and small water tank (**FIGURE 1**).

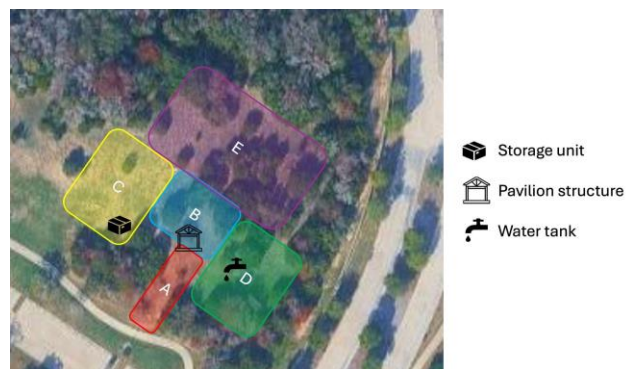


FIGURE 1 Planned use of TAMUCT outdoor forensic lab spaces. A: Unobstructed entrance from parking/pathway, B: Central area with pavilion structure, concrete pad and outdoor whiteboard, C: Open area with storage unit, D: wooded area with water tank, E: undeveloped area with some open spaces and vegetation present.

One of the most significant enhancements to the outdoor lab was the installation of a permanent shade structure: a metal single slope canopy measuring 20 feet by 30 feet (6.1 meters by 9.2 meters), supported by concrete piers, similar in design to public park pavilions. This addition was a strategic response to one of our major concerns for long-term use of the space: ensuring weather resilience, particularly intense sun and/or rain, without having to reschedule classes. While rainfall can enhance the realism of crime scene simulation, it often introduces logistical challenges, especially when complex scenes have been carefully arranged. In the past we have used temporary canopies, but these are time consuming to set up, must be transported to the site, and over time break down from use. The permanent canopy offers a more durable and efficient solution, providing consistent shelter from sun exposure, an acute issue in Central Texas, and light to moderate rainfall. Additionally, the covered area itself can be used as a functional space for instructional activities regardless of weather conditions. We also planned the space to include a storage solution for equipment and supplies. The equipment used to process burial scenes for example: shovels, screens, excavation tools, tarps, measuring tapes, etc. all need to be transported to the site for simulations. We can also store items used to create simulations as well as any additional materials needed by the students. In past years, we have transported these items in personal vehicles, carrying them down from campus storage rooms to vehicles and out to the site, wasting precious time and human power. Having storage on site dramatically improves timing and human power considerations.

While we could have selected any number of different types of storage sheds, we decided on a shipping container, also known as a CONEX. These are widely available, relatively inexpensive as far as storage

structures go, large enough for most storage needed for this purpose, easily transported to the site, and able to be secured with padlocks. Having an on-site storage, such as shipping container or even a temporary storage shed, can be secured and locked and equipment stored there for use during simulations. Shelving in the storage unit is also helpful to keep items organized. Students are then able to directly select the material needed for each activity and then store it again after the activity.

Aside from the pavilion and storage unit, we planned for additional materials at the site to improve conditions for students. One simple addition was an outdoor magnetic whiteboard. Students can use this in a variety of ways during activities on site, and we are also able to post information here during class at the lab. We also decided to add a concrete pad measuring 20 feet by 10 feet (6.1 meters by 3 meters), or a third of the floor space of the pavilion. This addition allows a more stable and safer base to place portable tables for conducting learning activities on site. We left about half of the area under the shade structure as bare soil, which allows for some simulations to be conducted in the soil directly under the structure. For example, activities to better understand how to set up excavation grids or how to record depth and profile measurements are possible in this area.

When we conducted outdoor activities closer to the main campus buildings, we were able to use the power and water supply of the buildings. While moving simulations to a designated outdoor lab was beneficial in many ways, we lost our direct access to power and water. Non-potable water was used for some lab activities outside, and for cleaning and maintaining supplies and equipment. Power was also useful for lights, fans or other equipment. To allow for these utilities at the new site, which does not have direct access to a campus building, we installed a water tank and have purchased a generator for on-site use. These items are optional and not needed to run simulations, but they do improve the experience for students and for instructors to sustain them in the long term.

Hazards and Safety Precautions

Before working outside for activities or simulations, students are prepared by reviewing an outdoor safety guide with instructors. The safety guide includes information on hazards of working outdoors and ways to stay safe in varying weather. Students are required to bring water and to wear appropriate attire such as long-sleeved shirts, pants, and sturdy shoes to protect from the elements as well as insects and vegetation. In our area, poison ivy, stinging insects, cacti, and snakes may all possibly be encountered and the guide provides information on how to handle concerns. Tool safety is also reviewed. Last, our university requires students to

sign liability release forms prior to beginning any outdoor activity.

Results

The development of the outdoor forensic lab followed a phased timeline beginning with final planning and administrative approval in September 2023. During this stage, the institution also assisted in securing funding to support the acquisition of essential materials. Initial use of the site with students began in Fall 2023, allowing faculty to assess the functionality of the space and identify areas for future infrastructure and improvement. This early engagement informed the long-term sustainability of the lab. Between January and May 2024, construction bids were solicited, and we began procuring materials. Major construction activities, including installation of the pavilion, delivery of the shipping container, and overall site preparation, took place between May and November 2024. Although the lab was operational by November 2024 and available for student use, final components, such as the outdoor whiteboard and water tank, were still being installed, and equipment was gradually moved to the site. By May 2025, the lab was fully outfitted and operational, marking the completion of a roughly one-year construction phase and a total development period of approximately 18 months from planning to full implementation (**FIGURE 2**).



FIGURE 2 Structural elements of the completed TAMUCT forensic outdoor lab. The metal pavilion with concrete pad, whiteboard, and water tank are visible. The TAMUCT parking lot and Warrior Hall building are visible just beyond the lab.

During the Fall 2024 semester the first classroom activities were conducted at the site. In comparison to our previous temporary locations, one of the most immediate and measurable impacts of the outdoor forensic lab has been the elimination of the logistical burden involved in moving equipment. In prior semesters, all tools and

materials, ranging from excavation gear and tarps to props and evidence kits, had to be transported from various indoor campus storage rooms to random outdoor locations using personal vehicles. This not only consumed significant setup and teardown time but also placed physical strain on faculty and students. The addition of an on-site storage unit has allowed materials to remain securely housed at the lab, reducing prep time and enabling more instructional time during class sessions. Hazardous chemicals and heat sensitive equipment are now the only things that must be relocated for each class.

During the first semester of implementation, students engaged in a range of hands-on activities within the completed outdoor forensic lab, including evidence location, collection, and the full investigation of mock crime scenes. The student learning objectives used at the forensic outdoor lab are the same as those we have used in our previous crime scene simulations, where they are discussed in detail along with examples of class materials, assignments, and rubrics (7). Overall, the student learning objectives for the crime scene modules were designed to ensure that learners gained both a theoretical foundation and practical competency in forensic methods. Students progressed through activities designed to help them acquire and understand basic principles, apply forensic skills and methods, and by the end of the class, to activities involving analytical reasoning such as analysis and interpretation.

The design and layout of the site proved effective in supporting both independent and collaborative learning. Students were assigned specific sectors within the space for evidence recovery and scene processing, which enabled them to work concurrently without interference. Evidence collected from the scenes was then brought to the centralized covered pavilion, which functioned as a field processing station. Here, students utilized tables as makeshift laboratory workspaces to conduct initial analyses and documentation. A notable advancement over previous semesters was the ability to maintain scene continuity and preserve evidence in place over multiple class sessions. In contrast to earlier simulations, which relied on temporary campus locations requiring the transportation of evidence between indoor and outdoor settings, the new site allowed for continuous, stable field operations. Student groups intuitively adapted the pavilion as a command post, while the adjacent shipping container storage unit was repurposed as a mobile crime scene unit, providing accessible supplies and equipment to support their investigative tasks.

Looking ahead, the outdoor forensic lab will support a broader range of applied activities, including mock burials, excavation exercises, and increasingly complex crime scene reconstructions. One of the most significant advantages of having a dedicated, permanent space is the ability to maintain continuity across academic terms. In contrast to prior semesters, where temporary sites

required each scenario to be recreated from the ground up, the fixed location now enables faculty to implement longitudinal or progressive simulations. These may include evolving crime scenes or evidence trails that develop over multiple weeks or semesters. Newly installed features such as a mounted outdoor whiteboard and a non-potable water tank, though not available during the initial use of the space, will further support these activities by enhancing student organization and enabling on-site equipment cleaning and evidence processing. This continuity and improved infrastructure will allow students to engage in extended investigative projects that mirror real-world forensic casework, thereby deepening their analytical skills and enhancing the authenticity of their experiential learning.

Student feedback from the initial offering of the course was positive. However, because the course has only been taught once, the number of student responses and the limited timeframe do not provide a sufficient basis for drawing meaningful or generalizable conclusions. Future student evaluation survey data will be collected across multiple courses to provide a more comprehensive understanding of student engagement and learning outcomes over time.

Discussion and Conclusion

This paper addresses a central challenge in forensic education, the lack of permanent, suitable outdoor space for crime scene simulations. By securing and developing a designated outdoor forensic lab, we were able to overcome the limitations of temporary, semester-by-semester site selection and create a sustainable, flexible, and inclusive environment for hands-on learning. The lab not only resolved logistical burdens, such as equipment transport and space accessibility, but also expanded the instructional potential for both short- and long-term educational goals.

Unlike temporary outdoor spaces or fixed indoor crime scene houses, our designated outdoor lab represents a hybrid approach that combines the realism and adaptability of outdoor environments with the infrastructure and continuity of a permanent facility. While previous studies and reports (5, 8) highlight the benefits and constraints of temporary or loaned spaces, our model demonstrates how committing institutional support to a designated outdoor lab can enhance simulation quality, program stability, and long-term planning.

This study is focused on the educational application of a forensic outdoor lab. It does not address the use of outdoor spaces for forensic or taphonomic research, such as human decomposition studies conducted at body farms. While these are valuable areas of inquiry, our lab is designed exclusively for instructional use, which may

limit the generalizability of our findings to other forensic disciplines or research-based labs.

The establishment of a designated outdoor forensic lab has opened new avenues for interdisciplinary collaboration, extended learning opportunities, and community engagement. Beyond its core use in forensic science education, future development may include use by archaeology students for stratigraphic excavation training, biology faculty for taphonomy-adjacent lessons (excluding decomposition), and emergency management programs for field-based simulations. The space also presents opportunities for collaboration with law enforcement professionals through mock investigation workshops and joint training exercises. Additionally, the lab may serve as a venue for outreach events, such as early college student days, forensic open houses, and career-exploration activities, reinforcing its value as a dynamic, shared campus resource.

The long-term value of the outdoor forensic lab lies in its balance of authenticity and functionality, providing students with realistic, hands-on experiences while offering faculty a consistent, well-equipped environment for creative and pedagogically sound simulations. As noted by Woolridge and Bailey (5), such spaces may even accommodate temporary crime scene houses, further expanding their versatility by integrating indoor and outdoor simulation strategies. This model may serve as a blueprint for other institutions seeking to enhance experiential learning in forensic education through sustainable, inclusive facility design.

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References

1. Abouzahir H, Belhouss A & Benyaich H. Learning clinical reasoning in forensic Mmedicine: A Scoping Review. *Med Sci Educ* 2024;34 695–703. <https://doi.org/10.1007/s40670-024-02013-z>
2. Eutyclus NG. The role of education management in fostering ethical practices in forensic science education. *Forensic Sci Int* 2024;355. <https://doi.org/10.1016/j.forsciint.2024.111937>
3. Harrison K, Morgan C. Simulation immersive gameplay and virtual realities in forensic science education. In pp. 197–211 of *Forensic Science Education and Training: A Tool-Kit for Lecturers and Practitioner Trainers*. Williams A (ed). John Wiley & Sons, 2017.
4. Keele University. Crime scene house. School of Chemical and Physical Sciences – Forensic Science. 2023. (Accessed 28 Jul 2025). <https://www.keele.ac.uk/scps/forensicscience/ourfacilitiesandequipment/crimescenehouse/>
5. Woolridge JL, Bailey DJS. Learning to catch a killer: The advantages and challenges of planning a community-oriented murder mystery event to improve forensic science education outreach. *J Forensic Sci Educ* 2023;5(1).
6. Williams A (ed). *Forensic Science Education and Training: A Tool-Kit for Lecturers and Practitioner Trainers*. John Wiley & Sons, 2017.
7. Bracewell TE, Jones CA. The use of simulated crime scenes in teaching undergraduate forensic sciences: Implementing an active learning approach to forensics. *Sci Just* 2022;62(6):758–67. doi:10.1016/j.scijus.2022.08.003
8. Rubins S. Authentic assessment: Using authentic assessment to foster and improve learning through a mock crime scene final exam in a high school and college level forensic science course. *J Forensic Sci Educ* 2024;6(2).
9. Crime Scene 360 Tour. University of Nebraska—Lincoln, Institute of Agriculture and Natural Resources, Forensic Science, 2025. (Accessed 11 Sep 2025). <https://forensic.unl.edu/crime-scenes-360-tour/>
10. Bauer, EC, Murietta C, Barksdale LE. Teaching forensic entomology with common grocery items: decomposition and insect succession studies. *J Forensic Sci Educ* 2023;5(1).
11. Bauer, EC, Murietta C, Barksdal, LE, Sidel E. Death Scene Insect Succession in Nebraska: A Guidebook. University of Nebraska—Lincoln, 2022. (Accessed 11 Sep 2025). <https://digitalcommons.unl.edu/entomologyfacpub/983/>
12. FAC. Forensic Anthropology Center at the University of Tennessee Knoxville. 2025. (Accessed 28 Jul 2025). <https://fac.utk.edu/>
13. FARF. Forensic Anthropology Research Facility at Texas State University San Marcos. 2025.(Accessed 28 Jul 2025). <https://www.txst.edu/anthropology/facts/labs/farf.html>
14. ADA. Information and Technical Assistance on the Americans with Disabilities Act. 2022. (Accessed 28 Jul 2025). <https://www.ada.gov/>
15. Stokes A, Feig AD, Atchison CL, Gilley B. Making geoscience fieldwork inclusive and accessible for

students with disabilities. *Geosphere* 2019; 15:1809–1825. <https://doi.org/10.1130/GES02006.1>