



**SkillsUSA Championships Technical Standards** 

# PURPOSE

To evaluate a team's ability to conduct a crime scene investigation.

# **ELIGIBILITY (TEAM OF THREE)**

Open to a team of three active SkillsUSA members enrolled in programs, work-based learning, and/or community training programs with law enforcement and/or public safety as an occupational objective. Each state may send one high school and one college/postsecondary team.

# **CLOTHING REQUIREMENTS**

#### **Class D: Competition Specific — Blue Attire**

- Official SkillsUSA light blue work shirt
- Navy pants
  *Note:* Must be work style pants (e.g., Dickie's) or BDU/tactical style (e.g. 5.11).
  Accompanied by black or brown belt.
- Black, brown, or tan work safety shoes (Protective toe cap is not required. Shoes must be professional/police or tactical style boots. No tennis/running style shoes.)

*Note:* Safety glasses must have side shields or goggles. (Prescription glasses may be used only if they are equipped with side shields. If not, they must be covered with goggles.)

These regulations refer to clothing items that are pictured and described at <u>www.skillsusastore.org</u>. If you have questions about clothing or other logo items, call 1-888-501-2183.

*Note:* Competitors must wear their official competition clothing to the competition orientation meeting.

## **EQUIPMENT AND MATERIALS**

- 1. Supplied by the technical committee:
  - a. Crime scene: All necessary materials for the competition not specified elsewhere.
- 2. Supplied by the competitors:
  - a. Crime scene kit containing materials necessary to conduct a crime scene investigation. At a minimum:
    - 1). Digital Camera (not a cell phone) with removable media card
    - 2). PPE to include safety glasses, mask/face shield, shoe covers, and non-latex examination gloves (Tyvek optional but not recommended)
    - 3). Latent print examination kit/fingerprint kit with cards and tape
    - 4). Measuring device (laser measuring device or tape measure)
    - 5). Scale (preferably an 'L' shaped scale)
    - 6). Sterile swabs and swab boxes
    - 7). Water in dispenser bottle/dropper (should be distilled, but due to travel restrictions can be tap)
    - 8). Evidence placards/markers/cones
    - 9). Evidence bags; paper and plastic, various sizes
    - 10). Tamper proof evidence tape
    - 11). Sharpie
    - 12). Sketching kit
    - 13). Tweezers
    - 14). Small pocket notebook for field notes
    - 15). Pens and #2 pencils
    - 16). Flashlight
- 3. All competitors must create a one-page resume. See "Resume Requirement" below for guidelines.

#### **RESUME REQUIREMENT**

Competitors must create a one-page resume to submit online. SkillsUSA South Carolina competitors should submit their resume by the deadline published on the competition updates page of our website. Failure to submit a resume will result in a 10-point penalty.

Your resume must be saved as a PDF file type using file name format of "Last Name\_First Name." For example, "Amanda Smith" would save her resume as Smith\_Amanda. If you need assistance with saving your file as a PDF, visit the Adobe website for more information.

Note: Check the Competition Guidelines and/or the updates page on the state website.

#### **PROHIBITED DEVICES**

Cellphones, electronic watches and/or other electronic devices not approved by a competition's national technical committee are *NOT* allowed in the competition area. Please follow the guidelines in each technical standard for approved exceptions. Technical committee members

may also approve exceptions onsite during the SkillsUSA Championships if deemed appropriate.

#### **Penalties for Prohibited Devices**

If a competitor's electronic device makes noise or if the competitor is seen using it at any time during the competition, an official report will be documented for review by the Director of the SkillsUSA Championships. If confirmed that the competitor used the device in a manner which compromised the integrity of the competition, the competitor's scores may be removed.

## **SCOPE OF THE COMPETITION**

The competition is defined by industry standards as identified by the SkillsUSA technical committee.

The following is a list of materials used in the formation of the competition:

- FBI Handbook of Forensic Services (2019): https://www.fbi.gov/file-repository/handbook-of-forensic-services-pdf.pdf/view
- NIST Crime Scene Investigation A Guide for Law Enforcement (2013): https://www.nist.gov/system/files/documents/forensics/Crime-Scene-Investigation.pdf
- Criminal Investigation by Thomas Brown from Open Educational Resources (2022): <u>https://www.oercommons.org/courses/criminal-investigation</u>

#### **KNOWLEDGE PERFORMANCE**

The competition will include a test assessing knowledge from the Standards and Competencies section listed below. Team members will test independently and cannot consult with one another during testing. See Appendix A for a list of terms for review. Each competitor is also required to take the SkillsUSA Professional Development Test.

#### **SKILLS PERFORMANCE**

The competition will include activities that simulate situations encountered by criminal investigation professionals. See Appendix B for a list of examples.

The Skills Performance is broken down into four main sections.

- 1. Crime Scene Practicum students will have 15 minutes in a mock crime scene. They will photograph, search, identify evidence, and collect information necessary to record the crime scene. They will not remove evidence. The focus is on the recording stage of crime scene processing.
- 2. Paperwork the students will then complete the crime scene sketch, photo log (with photos), property forms, and individual narratives (paperwork). Their photos will be collected from their media card for judging.
- 3. Skill Demonstration the team will be given three (3) skills to demonstrate. The team will decide which member will demonstrate each skill. Each member of the team will demonstrate one skill. Each skill can only be demonstrated by one member of the team. Examples of skills to be demonstrated may include, but are not limited to, the following: collecting a type of evidence, processing a type of evidence, or a similar crime scene skill. See Appendix B for a list of possible skills.

4. Evidence Interpretation - the team will work together to evaluate or analyze evidence. During this exercise the team may be asked to examine a single article of evidence, a lab result(s), or compare multiple pieces of evidence and then be asked to make the proper conclusion about the evidence.

*Note:* The competition committee may choose to connect all the events in one common crime event and link all the stations. The only required connection is between the practicum and the paperwork. The Demonstration and Evidence stations may cover skills and items not connected to the mock crime scene.

## **COMPETITION GUIDELINES**

- 1. Each competitor must work independently without assistance from instructors, other teams and/or observers. Contact with competitors must be coordinated through designated event staff only. Any violation of this may result in a disqualification of the team.
- 2. Cellphones, iPads/tablets, smart watches, wearable technology, or any other electronic communication device is prohibited in the competition area. Body cameras are allowed (as long as they do not violate any other prohibition). See "Prohibited Devices" section above for more information.
- 3. No one but competitors, judges, and event staff are allowed in the competition area at any time. Observation is limited to the area designated by the judges or event staff. Outdoor competition area may only be accessed by judges, competitors, and event staff. Any violation of this may result in the disqualification of the team.
- 4. Contact with the judges in any way, at any time, without the expressed permission of the competition coordinator, is prohibited.

## **STANDARDS AND COMPETENCIES**

#### **CSI 1.0** — Demonstrate or explain activities prior to conducting a crime scene search

- 1.1. Obtain information from the responding officer and secure the scene
- 1.2. Explain laws, processes and protocols securing a scene
- 1.3. Explain laws and legal issues related to crime scene processing

#### CSI 2.0 — Explain and demonstrate the use of crime scene photography

- 2.1. Demonstrate proper crime scene photography
- 2.2. Document photographs taken at the crime scene

#### CSI 3.0 — Properly search for, collect and remove physical evidence from a crime screen

- 3.1. Explain and demonstrate appropriate search method to use
- 3.2. Properly identify and mark all evidence
- 3.3. Explain methods for collecting various types of evidence
- 3.4. Explain and demonstrate proper preserving and preparing for transport of all evidence

#### CSI 4.0 — Draw a crime scene sketch using proper measurements, symbols and labels

- 4.1. Demonstrate proper use of measurements
- 4.2. Demonstrate the proper use of symbols and labels
- 4.3. Complete a sketch including all required elements

# ${\rm CSI}~{\rm 5.0-Apply}$ proper procedures for developing and collecting latent fingerprints at a crime scene

- 5.1. Demonstrate the ability to properly lift and transfer a latent fingerprint from a designated item of evidence
- 5.2. Demonstrate the proper procedure for completing a latent fingerprint card

#### CSI 6.0 — Release a crime screen properly and legally

- 6.1. Demonstrate the ability to prepare an evidence log
- 6.2. Demonstrate the ability to remove all evidence and equipment from crime scene

#### **CSI 7.0** — Work together as a professional team to conduct a crime scene investigation

- 7.1. Demonstrate professional bearing and demeanor
- 7.2. Demonstrate the ability to assign team members' tasks equal to their aptitude

#### CSI 8.0 — SkillsUSA Framework

The SkillsUSA Framework is used to pinpoint the Essential Elements found in Personal Skills, Workplace Skills and Technical Skills Grounded in Academics. Students will be expected to display or explain how they used some of these Essential Elements. Please reference the graphic, as you may be scored on specific elements applied to your project. For more, visit: www.skillsusa.org/who-we-are/skillsusa-framework/



## APPENDIX A

Below is a list of terms to prepare for the knowledge test. The list below is not exhaustive but represents the range of possible content.

- Algor Mortis
- Blank samples
- Bindle paper
- Chain of custody
- Circumstantial evidence
- Comparison samples
- Control samples
- Crime scene measuring techniques (triangulation method, rectangular coordinate method, transecting baseline coordinate method, polar coordinate method)
- Crime scene photographs (overall, midrange, close-up)
- Crime scene search methods (grid search, spiral search, lane/strip search, zone search)
- Crime scene security log
- Direct evidence
- Elimination samples
- Exculpatory evidence
- Faraday bags

- Forensic archaeology
- Forensic entomology
- Forensic odontology
- Forensic pathology
- Fruit of the Poisonous Tree Doctrine
- Inculpatory evidence
- Latent fingerprints
- NDIS/CODIS
- Oblique lighting
- Patent fingerprints
- Post-mortem lividity
- PPE
- Presumptive tests
- Prioritization of evidence collection
- Processing/collection methods
- Proper packaging of various types of evidence (drugs, biological material, firearms, knives, etc.)
- Reference samples
- Rigor mortis
- Routes of exposure
- Standards of proof (probable cause, reasonable suspicion, proof beyond a reasonable doubt, preponderance of the evidence)
- Statutory/common law
- Transient evidence collection

## APPENDIX B

The list below is not exhaustive but represents the range of possible competition skills:

- Lifting fingerprints
- Collecting DNA and bodily fluid evidence
- Photographing scene
- Photographic evidence
- Sketching a scene
- Measuring a scene
- Using alternative light sources
- Searching for and identifying evidence
- Identify, collect, and process trace evidence
- Interpret blood stains
- Interpret ballistic evidence casings, directionality, sequencing
- Complete paperwork associated with CSI including narratives, logs
- Practice safety protocols related to CSI

- Collect evidence
- Verbalize constitutional and legal applications in scenarios
- Interpret DNA evidence
- Classify, interpret and identify fingerprint evidence
- Packaging and preserving various types of evidence
- Presumptive testing
- Interpretation of anthropological evidence

## APPENDIX C

#### **Sample Scorecard**

| Standard Evaluated             | Possible Points |
|--------------------------------|-----------------|
| Written Test                   | 150             |
| Skill Demonstration 1          | 100             |
| Skill Demonstration 2          | 100             |
| Skill Demonstration 3          | 100             |
| Crime Scene Practicum          | 100             |
| Crime Scene Sketch             | 100             |
| Crime Scene Photos and Log     | 100             |
| Paperwork, Narrative           | 125             |
| Evidence Interpretation        | 100             |
| SkillsUSA Framework Assessment | 25              |
| TOTAL                          | 1000            |

#### **COMMITTEE IDENTIFIED ACADEMIC SKILLS**

The technical committee has identified that the following academic skills are embedded in this competition.

#### **Math Skills**

- Measure angles
- Use the rectangular coordinate method to locate evidence (uses two fixed reference points and right angles to indicate the exact location of evidence in the crime scene)

#### **Science Skills**

- Plan and conduct a scientific investigation
- Use the proper method for developing latent fingerprints
- Identify and demonstrate necessary safety precautions for handling and processing DNA evidence

#### Language Arts Skills

- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate use of such verbal communication skills as word choice, pitch, feeling, tone and voice
- Demonstrate use of such nonverbal communication skills as eye contact, posture and gestures using interviewing techniques to gain information
- Organize and synthesize information for use in written and oral presentations
- Demonstrate informational writing
- Edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure and paragraphing

#### **CONNECTIONS TO NATIONAL STANDARDS**

State-level academic curriculum specialists identified the following connections to national academic standards.

#### **Math Standards**

- Algebra
- Geometry
- Measurement
- Data analysis and probability
- Problem solving
- Reasoning and proof
- Communication
- Connections
- Representation

*Source:* NCTM Principles and Standards for School Mathematics. For more information, visit: <u>http://www.nctm.org.</u>

#### **Science Standards**

- Understands the principles of heredity and related concepts
- Understands the structure and function of cells and organisms
- Understands the structure and properties of matter
- Understands the nature of scientific knowledge
- Understands the nature of scientific inquiry

*Source:* McREL compendium of national science standards. To view and search the compendium, visit: <u>www2.mcrel.org/compendium/</u>.

#### Language Arts Standards

- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- Students conduct research on issues and interests by generating ideas and questions and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information).

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: <u>www.ncte.org/standards.</u>