PHOTOGRAPHY

SkillsUSA Championships Technical Standards

PURPOSE

To evaluate each competitor's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of (still) photography.

First, download and review the General Regulations at updates.skillsusa.org.

ELIGIBILITY

Open to active SkillsUSA members enrolled in programs with photography as an occupational objective. Each state may send one high school and one college/postsecondary competitor.

CLOTHING REQUIREMENTS

Class E: Competition Specific — Business Casual

- Official SkillsUSA white polo shirt
- Black dress slacks or black dress skirt (knee-length minimum)
- Black closed-toe dress shoes

Note: Wearing socks or hose is not required. If worn, socks must be black dress socks and hose must be either black or skin-tone and seamless/nonpattern.

These regulations refer to SkillsUSA Championships Clothing Classifications that are pictured and described at skillsusastore.org. If you have questions about competition uniforms, call the SkillsUSA Store at 888-501-2183.

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

EQUIPMENT AND MATERIALS

1. Provided by the technical committee:
   a. System for printing
   b. Portrait studio
   c. System for troubleshooting and color correction
   d. Judge's supplies for job interview section
2. Provided by the competitor:
   Note: This is a minimum required equipment list. Any additional accessories are acceptable and up to the discretion of the student (e.g., on-camera flash, reflector, additional lenses, etc.). Remember that all equipment brought on the "field assignment" must be carried by the student and fit in shared bus seating (in essence, one medium to large camera bag).
   a. One DSLR or mirrorless camera with removable lens capabilities (If the competitor's camera does not have a removable lens, then it must have both a hot shoe for a flash to connect to and manual exposure mode.)
   b. Minimum: two batteries with charger
   c. Minimum: two 16 GB memory cards
   d. One speedlight flash with wireless transmitter (be sure they work together)
   e. One hand-held flash meter
   f. USB card reader or camera USB cable
   g. Computer with USB and/or SD card slot (laptop preferred). Please record the school's login password for the student.
   h. Adobe Photoshop (be sure Photoshop can open the camera's RAW files)
   i. Two images for Print Competition (see competition guidelines for requirements)
   j. One - 6' multiple-outlet power strip
   k. All competitors must create and submit online a one-page single sided resume. See "Online Submission Requirements" below for guidelines. In addition to the online submission, competitors must also bring a hard copy of their resume to the competition.

Note: All national competitors must also check for competition-specific updates and/or competitor preparation instructions on the SkillsUSA website at updates.skillsusa.org.

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.

ONLINE SUBMISSION REQUIREMENTS

All SkillsUSA national competitors must submit their one-page single sided resume online. The deadline and link for online submissions will be published on updates.skillsusa.org.
Failure to submit any of the required document(s) listed below by the established deadline will result in a 10-point penalty.

1. One-page single sided resume

Your submission must be saved as PDF file type using the file name format of "Your Last Name_Your First Name_Resume." For example, "Amanda Smith" would save the individual PDF submissions file as:

- Smith_Amanda_Resume

SCOPE OF THE COMPETITION

KNOWLEDGE PERFORMANCE
The competition will include a test assessing knowledge of general photographic concepts.

SKILL PERFORMANCE
The competition will include a series of hands-on performance activities assessing overall photographic mechanics and techniques.

COMPETITION GUIDELINES
1. **Knowledge Test:** The test has a series of multiple-choice questions that assess photographic knowledge. Topics covered include, but are not limited to, the following:
   a. History of photography (iconic photographers and advancements in technology)
   b. Exposure controls and their effects on images
   c. Lens choices given a photographic situation (sports, jewelry, studio portraits, etc.)
   d. General terminology
   e. Photoshop tools, workflow, processes, etc.
2. **Field Assignment:** The assignment evaluates the competitor's creative ability and adherence to competition guidelines. Competitors are brought to an undisclosed location to capture images based on a theme chosen by the technical committee. Competitors will then choose their best images and apply global edits and light editing before producing a contact sheet for judging. Scoring is based on:
   a. Technical: exposure and focus control
   b. Creative: overall use of composition, lighting, impact, etc.
   c. Level of editing (edits must be global in nature and must not be overdone)
   d. Competitor's adherence to time limits, location and theme
3. **Conceptual Assignment:** Competitors will use Adobe Photoshop to combine a minimum of three images from their chosen field assignment to produce a creative conceptual piece of art. Very few parameters are put on this competition, as it is meant to evaluate creativity.

4. **Portrait Studio:** Students will be evaluated on their use and understanding of studio lighting (strobes). Scoring is based on, but not limited to:
   a. Standard studio portrait lighting patterns (e.g., split, hatchet, Rembrandt, loop, butterfly, broad, short, etc.)
   b. Light ratios (due to a variety of teaching methods, competitors will be given a "main" light aperture setting [e.g., f/11] and a stop difference for the "fill" light (e.g., two stops)
   c. Use of a hand-held light/flash meter
   d. Interaction with the model and posing quality
5. **Commercial Studio:** Due to the varying nature of the subject, students' commercial images will be evaluated on the final photograph. Judging is based on, but not limited to:
   a. Product placement
   b. Lighting of product
   c. Clarity of product name
   d. Use of props
   e. Overall creativity and impact of image
6. **Digital Editing:** Competitors will be given images to manipulate in Adobe Photoshop. This competition evaluates the student's knowledge of professional editing techniques, including, but not limited to:
   a. Selections and refine edge
   b. Layer masks and adjustment layers
   c. Green screen extractions
   d. Color correction
   e. Resizing layers
   f. Correct naming and formatting
7. **Troubleshooting:** Competitors will be shown a series of images that have issues commonly found in today's digital processing. Competitors must correctly identify these problems from the list provided. These problems include but are not limited to:
   a. Chromatic aberration
   b. Barrel distortion
   c. Aliasing
   d. White balance
   e. Halos
   f. Posterization
   g. JPEG artifacts
   h. Parallax
8. **Print Competition:** Competitors must submit two prints produced before the competition in any category of their choice. Prints will be on public display and must *not* contain any questionable content, including but not limited to drugs, sex, violence, illegal activity, etc. Prints must adhere to the following criteria:
   a. Print size must be an 11"x14" or 10"x15"
   b. Both prints must be mounted to a 16"x20" black foam core board (¼" thick) with a 16"x20" black over mat

c.　Each print must have a label placed on the back upper middle section that includes the following information:
　　　　1). Competitor number (given at the competition)
　　　　2). Cell phone number
　　d.　Prints must be brought to the orientation. Prints received after the orientation will receive a penalty.
9.　**Job Interview:** Competitors will be interviewed to assess their communication skills and overall job readiness.

STANDARDS AND COMPETENCIES

P 1.0 — Apply and implement overall photographic knowledge through a multiple-choice written test
1.1.　Identify advancements in photographic history.
1.2.　Define a variety of camera functions.
1.3.　Explain studio lighting patterns and settings.
1.4.　Define a variety of digital photographic terms and terminologies.

P 2.0 — Apply the knowledge and skill needed to conduct a photographic field assignment and produce a contact sheet for judging
2.1.　Demonstrate technical proficiency in the areas of proper manual exposure and focus.
2.2.　Demonstrate artistic ability through use of standard rules of art and design including, but not limited to rule of thirds, balance, leading lines, worm's/bird's eye, etc.
2.3.　Demonstrate an ability to capture images that adhere to the theme of the assignment.
2.4.　Demonstrate the ability to format, edit and save the contact sheet using competition guidelines.

P 3.0 — Apply the artistic techniques to manipulate multiple images in a free-form conceptual assignment
3.1.　Demonstrate the ability to use various manipulative tools in Adobe Photoshop.
3.2.　Show an ability to adhere to competition guidelines by using the minimum number of chosen field assignment images for this assignment stated by the chairperson.
3.3.　Show a creative relationship between the elements used in the assignment.

P 4.0 — Apply the knowledge and skill needed to create a standard studio portrait or commercial image
4.1.　Show an understanding of proper lighting patterns on a subject's face in a head-and-shoulder portrait (e.g., split, Rembrandt, loop, butterfly, broad, short).
4.2.　Demonstrate the ability to professionally light and capture a product for use in a commercial ad.
4.3.　Demonstrate correct placement of main and fill lights.
4.4.　Demonstrate correct lighting ratios by the setting of main and fill lights (i.e., main light = f/8 and fill light = f/4).
4.5.　Demonstrate understanding of correct camera settings (e.g., white balance, ISO, aperture, shutter speed).

4.6.   Demonstrate the ability to correctly crop the image in-camera (e.g., head/product placement, horizontal/vertical).

4.7.   Demonstrate the ability to professionally pose a portrait subject.

4.8.   Demonstrate the ability to use creative compositional techniques in creating a commercial image.

P 5.0 — Demonstrate the ability to use a variety of tools and techniques in Adobe Photoshop

5.1.   Apply the knowledge of manipulating a digital image through various techniques, including:

5.1.1.   Change orientation of an image.

5.1.2.   Change image size and/or crop.

5.1.3.   Use selection tools.

5.1.4.   Transform selections.

5.1.5.   Create layer masks.

5.1.6.   Use adjustment layers.

5.1.7.   Make tonal adjustments.

5.1.8.   Save and correctly name file.

P 6.0 — Show the ability to identify common problems in the processing and printing of digital images

6.1.   Apply knowledge of troubleshooting digital images by distinguishing between a series of images. Examples may include:

6.1.1.   Identify over-exposure.

6.1.2.   Identify blooming.

6.1.3.   Identify aliasing.

6.1.4.   Identify JPEG artifacts.

6.1.5.   Identify noise.

6.1.6.   Identify white balance incorrect setting.

6.1.7.   Identify over-sharpening.

6.1.8.   Identify color-fringing.

6.1.9.   Identify posterization.

6.1.10.   Identify under-exposure.

6.1.11.   Identify camera shake.

6.1.12.   Identify barrel distortion.

6.1.13.   Identify halos.

6.1.14.   Identify improper gamma.

6.1.15.   Identify flash synch – too fast.

6.1.16.   Identify oversaturation.

6.1.17.   Identify perspective shift (keystoning).

6.1.18.   Identify HDR (overdone).

6.1.19.   Identify parallax.

6.1.20.   Identify dirty sensor.

6.1.21.   Identify clogged printer nozzle.

6.1.22.   Identify lens vignetting.

P 7.0 — Apply the knowledge and skill to submit two portfolio prints that are consistent with the following criteria:

7.1. Meet required image size(s).

7.2. Show ability to present all prints mounted to a black foam core board.

7.3. Show ability to use black over mat on each print.

7.4. Demonstrate technical proficiency through proper exposure, focus, etc.

7.5. Show artistic ability through standard rules of art and design such as rule of thirds, leading lines, texture and positive-negative space.

P 8.0 — Demonstrate the knowledge skills necessary for a job interview

8.1. Present a resume for the interview.

8.2. Present a digital or print portfolio of photographic work.

8.3. Show an ability to communicate knowledge of photography.

8.4. Demonstrate soft skills necessary for the workplace.

P 9.0 — 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. For more, visit: https://www.skillsusa.org/who-we-are/skillsusa-framework/.

COMMITTEE IDENTIFIED ACADEMIC SKILLS

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

Math Skills

- Use fractions to solve practical problems.
- Use proportions and ratios to solve practical problems.
- Use scientific notation.
- Solve practical problems involving percentages.
- Apply transformations (rotate or turn, reflect or flip, translate or slide, and dilate or scale) to geometric figures.
- Make predictions using knowledge of probability.
- Make comparisons, predictions and inferences using graphs and charts.
- Solve problems using proportions, formulas and functions.

Science Skills

- Use knowledge of heat, light and sound energy.
- Use knowledge of nature and technological applications of light.

Language Arts Skills

- Provide information in conversations and in group discussions.
- Provide information for 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.

CONNECTIONS TO NATIONAL STANDARDS

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

Math Standards
- Numbers and operations
- Geometry
- Measurement
- Problem solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. For more information, visit: www.nctm.org.

Science Standards
- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands the nature of scientific inquiry

Language Arts Standards
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

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