

# PHOTOGRAPHY



## PURPOSE

To evaluate each contestant'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: <http://updates.skillsusa.org>.

## ELIGIBILITY

Open to active SkillsUSA members enrolled in programs with photography as the occupational objective.

## CLOTHING REQUIREMENTS

### Class E: Contest Specific — Business Casual

- Official SkillsUSA white polo shirt.
- Black dress slacks (accompanied by black dress socks or black or skin-tone seamless hose) or black dress skirt (knee-length, accompanied by black or skin-tone seamless hose).
- Black leather closed-toe dress shoes.

### Tuesday (Orientation):

Contestants must wear the official SkillsUSA clothing requirement listed above.

### Thursday (Contest Site):

Contestants must wear the official SkillsUSA clothing requirement listed above.

These regulations refer to clothing items that are pictured and described at:

[www.skillsusastore.org](http://www.skillsusastore.org). If you have questions about clothing or other logo items, call 1-888-501-2183.

**Note:** Contestants must wear their official contest clothing to the contest orientation meeting.

## EQUIPMENT AND MATERIALS

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.). The technical committee supplies systems for Printing, Portrait Studio, Troubleshooting, Color Correction and Job Interview sections. 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).

Provided by the contestant:

1. One DSLR or mirrorless camera with removable lens capabilities (bridge or compacts not accepted)
2. Minimum: two batteries with charger
3. Minimum: two 16 GB memory cards
4. One speedlight flash with wireless transmitter (be sure they work together)
5. One hand-held flash meter
6. USB card reader or camera USB cable
7. Computer with USB and/or SD card slot (laptop preferred). Please record the school's login password for the student.
8. Adobe Photoshop (be sure Photoshop can open the camera's RAW files)
9. Two images for Print Competition (see guidelines in "Scope of Contest")
10. All competitors must create a one-page résumé and submit a hard copy to the technical committee chair at orientation. Failure to do so will result in a 10-point penalty.

**Note:** Your contest may also require a hard copy of your résumé as part of the actual contest. Check the Contest Guidelines and/or the updates page on the SkillsUSA website at <http://updates.skillsusa.org>.

## SCOPE OF THE CONTEST

The contest is defined by industry standards. The contest is divided into two parts: a written exam testing overall photographic knowledge and a skill performance.

## Knowledge Performance

The contest will include a written knowledge exam that assesses the overall photographic knowledge through a series of multiple-choice questions.

## Skill Performance

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

## Contest Guidelines

1. **Written Test:** This test has a series of multiple choice questions that cover some of the following topics:
  - 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 contestant's creative ability and adherence to contest guidelines. Contestants are brought to an undisclosed location to capture images based on a theme chosen by the technical committee. Contestants 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. Contestant's adherence to time limits, location and theme
3. **Conceptual Assignment:** Contestants 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 contest, 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, contestants 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 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:** Contestants are given images to manipulate in Adobe Photoshop. This contest 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:** Contestants will be shown a series of images that have issues commonly found in today's digital processing. Contestants 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:** Contestants 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. Contestant number (given at the contest)
    2. Cellphone number
  - d. Prints must be brought to the first orientation meeting of the contest (Tuesday, unless otherwise announced). Prints received after the meeting will receive a penalty
  
9. **Job Interview:** Contestants will be given an interview 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 contest 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 contest 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 several 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 over saturation
  - 6.1.17 Identify perspective shift (keystoning)
  - 6.1.18 Identify HDR (over done)

- 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 of 11"x14"
- 7.2 Show ability to present all prints mounted to a *black* 16"x20" foam core board (¼" preferred)
- 7.3 Show ability to use *black* over mat on each print
- 7.4 Demonstrate technical proficiency through proper exposure, focus, etc.
- 7.5 Demonstrate artistic ability through use of standard rules of art and design such as rule of thirds, leading lines, texture and use of positive-negative space

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

- 8.1 Present a résumé for the interview
- 8.2 Present a digital or print portfolio of photographic work
- 8.3 Demonstrate an ability to communicate knowledge of the field of photography
- 8.4 Demonstrate soft skills necessary for the workplace

**Committee Identified Academic Skills**

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

**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 the nature and technological applications of light.

### 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.

### 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: <http://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.

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

#### Language Arts Standards

- Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior

experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

- 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 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: [www.ncte.org/standards](http://www.ncte.org/standards).