

PHOTOGRAPHY BLUEPRINT

This Blueprint contains the subject matter content of this Skill Connect Assessment. This Blueprint does **NOT** contain the information one would need to fully prepare for a SkillsUSA Championships contest. Please refer to the *SkillsUSA Championships Technical Standards* CD-ROM for the current year or purchase and download the relevant "Contest Singles." Both are available through www.skillsusa.org > Shop > Educational Materials Catalog.

Standards and Competencies

Demonstrate knowledge and understanding of light; as it relates to the field of photography

- Demonstrate knowledge and understanding of natural light
- Demonstrate knowledge and understanding of artificial (studio) light
- Demonstrate an understanding of proper lighting patterns on a subject's face in a head-and-shoulder portrait (i.e., Split, Rembrandt, Loop, Butterfly, etc.)
- Demonstrate an understanding of main and fill light
 - Demonstrate an understanding of main and fill light placement
 - Demonstrate the correct use of settings for main and fill lights (i.e., main light = f/8 and fill light = f/4)

Demonstrate knowledge and understanding of a digital SLR camera

- Demonstrate knowledge of camera features
- Demonstrate knowledge and understanding of camera functions
- Demonstrate understanding of correct camera settings and their applications, including:
 - Aperture
 - Shutter speed
 - ISO
 - White balance
- Correctly crop an image in-camera (i.e., head-and-shoulder cropping, etc.)

Demonstrate knowledge and understanding of standard rules of art and design

- Demonstrate technical proficiency through proper exposure, focus, etc.
- Demonstrate artistic ability through use of standard rules of art and design, such as:
 - The rule of thirds
 - Leading lines
 - Texture
 - Use of positive-negative space
- Meet required image size of 11"x14" (min) up to 16"x20" (max)

Demonstrate knowledge of editing tools (i.e. Adobe Photoshop) and their commonly used functions

- Change the orientation of an image
- Change the size of an image
- Make tonal adjustments on an image
- Reconstruct an image
- Crop an image
- Utilize layer masks
- Utilize modes
- Utilize profiles
- Save and name an image
- Color correct an image

Identify common problems in digital photography

- Identify over-exposure
- Identify blooming
- Identify a clogged printer nozzle
- Identify aliasing
- Identify JPEG artifacts
- Identify noise
- Identify improper white balance
- Identify over-sharpening
- Identify Newton rings
- Identify posterization

Demonstrate knowledge and understanding of digital printing

- Demonstrate knowledge of monitor calibrations
- Demonstrate knowledge of printer and paper profiles

Demonstrate the knowledge skills necessary for a job interview

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

Demonstrate professional development skills in a simulated customer-service or employment situation. Examples may include:

- Job interview
- Customer service scenario
- Communications
- Decision making, problem solving and/or critical thinking

Committee Identified Academic Skills

The SkillsUSA national technical committee has identified that the following academic skills are embedded in the photography training program and assessment:

Math Skills

- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- Use scientific notation
- Solve practical problems involving percents
- 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 verbal communication skills, such as word choice, pitch, feeling, tone and voice
- Demonstrate use of nonverbal communication skills, such 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. To view high school standards, visit: standards.nctm.org/document/chapter7/index.htm. Select “Standards” from menu.

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: www.mcrel.org/standards-benchmarks/.

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.readwritethink.org/standards/index.html.