



# Basic Digital Photography

## EXAM INFORMATION

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**Items**

60

**Points**

66

**Prerequisites**

NONE

**Grade Level**

10-12

**Course Length**

ONE SEMESTER

**Career Cluster**

ARTS, A/V TECHNOLOGY, AND  
COMMUNICATION

**Performance Standards**

INCLUDED

**Certificate Available**

YES

## DESCRIPTION

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This course is an introduction to the field of commercial photography. This course will cover a number of basic concepts, including but not limited to: purchasing a digital camera; image capture; image editing; and image output. This course will also feature Adobe Photoshop, its features and use. These concepts will enable the student to be more knowledgeable and prepared to enter the field of commercial photography. If available students are advised to continue on with the Commercial Photography course.

## EXAM BLUEPRINT

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STANDARD	PERCENTAGE OF EXAM
1- History of Photography	18%
2- Process of "Workflow"	5%
3- Digital Cameras	5%
4- Digital Camera Controls	15%
5- Memory Devices and File Types	4%
6- Operation of a Point and Shoot Camera	18%
7- Adobe Photoshop	28%
8- Elements of Composition	5%
9- Copyright Laws, Ethics, and Legal Issues	1%
10- Careers in the Field of Photography	1%
11- Professional Skills Needed in the Workplace (Optional)	



## STANDARD 1

STUDENTS WILL HAVE KNOWLEDGE OF THE HISTORY OF PHOTOGRAPHY

- Objective 1 History of Photography
- Objective 2 History of Digital Photography
- Objective 3 Brief history of Adobe Photoshop.
- Objective 4 Introduction to Digital Photography
  1. Differences in film and digital photography (how they record images).
  2. How light works in photography (primary colors of light).
  3. Demonstrate an understanding of how pixels are used in digital photography.

Standard 1 Performance Evaluation included below (Optional)

## STANDARD 2

STUDENTS WILL UNDERSTAND AND APPLY THE MULTISTEP PROCESS OF “WORKFLOW”

- Objective 1 Identify the multi-step process of workflow in Image capture.
  1. Check settings (mode, memory card, battery, etc.).
  2. Holding the camera (steady, shoot, and format)
  3. Composition
  4. Focus (auto or manual).
  5. Exposure (auto or manual - aperture and shutter priority)
  6. Light Metering
  7. Flash (on or off)
  8. Capturing the image
  9. Verify correct exposure or adjust and reshoot (histogram, overexpose, underexposed).
- Objective 2 Identify the multi-step process of workflow as it relates to *image editing*.
  1. Image transfer (downloading files to a computer).
  2. Image management (organizing files, photo selection and managing folders).
  3. Create a contact sheet (using any of the following programs: Photoshop, Lightroom, Bridge).
  4. Basic image editing (straighten, rotate, limited crop, adjust tonal range, contrast, and color correction).
- Objective 3 Identify the multi-step process of workflow as it relates to *image output*.
  1. Size/resolution for intended purpose (web, presentation or print).
  2. Cloud storage (Dropbox, Google Drive, Web Services.)

Standard 2 Performance Evaluation included below (Optional)

## STANDARD 3

STUDENTS WILL IDENTIFY DIFFERENT TYPES OF DIGITAL CAMERAS, THE LOCATION OF THEIR BASIC COMPONENTS, AND THE BENEFITS AND DRAWBACKS OF EACH TYPE

- Objective 1 Mobile Devices/Action cameras (Camera Phones, Tablets, GoPro).



- Objective 2 Digital Point and Shoot cameras.
- Objective 3 Digital Single-Lens Reflex (DSLR) cameras.
- Objective 4 Mirrorless Inter-Changeable Lens Cameras (MILC).

Standard 3 Performance Evaluation included below (Optional)

## **STANDARD 4**

STUDENTS WILL DEMONSTRATE THE APPROPRIATE USE OF THE CAMERA CONTROLS ON A DIGITAL CAMERA

- Objective 1 Exposure Modes (Auto, Shutter Priority, Aperture Priority, Program, and Manual).
- Objective 2 Pre-programmed modes (landscape, action, portrait, macro, night).

Standard 4 Performance Evaluation included below (Optional)

## **STANDARD 5**

STUDENTS WILL IDENTIFY MEMORY DEVICES AND FILE TYPES ASSOCIATED WITH DIGITAL CAMERAS AND SCANNERS

- Objective 1 Demonstrate an understanding of digital file formats as they pertain to image capture (i.e. RAW, TIFF, JPEG).
- Objective 2 Demonstrate an understanding of compression in digital file sizes as they pertain to image capture (i.e. Extra Fine, Fine, Basic, and Normal).
- Objective 3 Demonstrate an understanding of the difference between high and low resolution and how they are linked to pixelization. (Intended use of photograph i.e. print, email, photo sharing.)
- Objective 4 Identify common memory cards and camera compatibilities (e.g., compact flash, SD, Micro SD, XD, and internal storage).
- Objective 5 Identify necessary equipment used for downloading images to a computer (i.e. cables and card readers).
- Objective 6 Properly download files from the camera to computer.
- Objective 7 Demonstrate an understanding of how to scan an image for use with a computer (flat-bed scanner, film scanner, and negative scanner).

Standard 5 Performance Evaluation included below (Optional)

## **STANDARD 6**

STUDENTS WILL BE ABLE TO UNDERSTAND AND OPERATE A POINT AND SHOOT CAMERA OR DSLR

- Objective 1 Identify basic digital camera parts and their functions (i.e. viewfinder or LCD monitor, lens, mode dial, shutter release, etc.).
- Objective 2 Understand focal length and optical versus digital zoom.
- Objective 3 Use a tripod or other steady shoot method when it is appropriate.
- Objective 4 Identify the need and appropriate use of an on-camera flash.
- Objective 5 Identify the difference between Shutter Priority and Aperture Priority.



- Objective 6 Identify some of the basic differences between digital Point and Shoot and DSLR cameras (i.e. size, weight, and lens options).
1. Camera Memory Buffer
- Objective 7 Identify differences in types of photographic lenses for a DSLR. (Wide 10-35mm, Standard 50-70mm, Telephoto 80mm and above)

## **STANDARD 7**

STUDENTS WILL BE ABLE TO DEMONSTRATE BASIC PROFICIENCY IN THE USE OF ADOBE WORKSHOP

- Objective 1 Demonstrate how to use Photoshop to set size and resolution for images based on the intended use of the image (web, print).
- Objective 2 Demonstrate tonal adjustments (i.e. histogram, Brightness and Contrast, Shadow/Highlight correction, Levels, Dodge and Burn Tool).
- Objective 3 Demonstrate color correction (i.e. color balance, hue /saturation, and levels).
- Objective 4 Demonstrate cropping (i.e. cropping, straightening, and perspective).
- Objective 5 Demonstrate techniques for photo retouching (i.e. healing brushes, red eye, and clone stamp).
- Objective 6 Demonstrate and use the Layers pallet (i.e. active layer, layer order, creating and deleting layers, and Opacity).
- Objective 7 Demonstrate the black and white conversion process in Photoshop.
- Objective 8 Demonstrate effective use of the Undo and Redo (i.e. history pallet, step forward or backward).
- Objective 9 Demonstrate the use of the Transform tool (i.e. scale, rotate, skew, flip, and distort).
- Objective 10 Demonstrate the use of selection tools (i.e. Marquee, Lasso, Magic Wand, Quick Select tool).
- Objective 11 Demonstrate different imaging file types and know their intended use (.psd, .jpg, and .png).

Standard 7 Performance Evaluation included below (Optional)

## **STANDARD 8**

STUDENTS WILL UNDERSTAND AND DEMONSTRATE THE ELEMENTS OF COMPOSITION

- Objective 1 Demonstrate Simplicity/Emphasis as an element of composition.
- Objective 2 Demonstrate Rule of Thirds as an element of composition.
- Objective 3 Demonstrate Perspective as an element of composition (worms-eye, birds-eye).
- Objective 4 Demonstrate Leading Lines as an element of composition.

Standard 8 Performance Evaluation included below (Optional)

## **STANDARD 9**

STUDENTS WILL UNDERSTAND AND PRACTICE COPYRIGHT LAWS, ETHICS, AND LEGAL ISSUES DEALING WITH PHOTOGRAPHY AS IDENTIFIED IN THE UNITED STATES CODE TITLE 17 CHAPTER 1 SECTION 101

- Objective 1 Define copyright.
- Objective 2 Other definitions
1. Audiovisual works
  2. Computer program



3. Copies
4. Copyright owner
5. Digital transmission
6. Financial gain
7. Pictorial, graphic, and sculptural works
8. Work of visual art

**Objective 3** Students will practice ethics and rules governing photojournalism (i.e. editorial content must not be changed).

**Objective 4** Students will practice correct usage of copyright laws (i.e. the right to reproduce, manipulate, distribute, plagiarize, or exhibit another photographer's work outside of fair use provisions).

1. Time limitations
2. Portion limitations
3. Text material
4. Illustrations and photographs
5. Copying and distribution limitations

**Objective 5** Students will demonstrate understanding of ethics related to social and legal issues in subject choice (i.e. model releases, image appropriateness, and cultural sensitivity).

## **STANDARD 10**

STUDENTS WILL GAIN AN UNDERSTANDING OF THE CAREERS AVAILABLE IN THE FIELD OF PHOTOGRAPHY

**Objective 1** Students will cover the possible career options in the field of photography.

## **STANDARD 11 (Optional)**

STUDENTS WILL DEVELOP AN UNDERSTANDING OF PROFESSIONAL SKILLS NEEDED FOR THE WORKPLACE THROUGH THE SKILLSUSA PDP PROGRAM

**Objective 1** As a participating member of the SkillsUSA student organization complete the SkillsUSA Level I Professional Development Program.

1. Complete a self-assessment inventory and identify individual learning styles.
2. Discover self-motivation techniques and establish short-term goals.
3. Determine individual time-management skills.
4. Define future occupations.
5. Define awareness of cultural diversity and equity issues.
6. Recognize the benefits of conducting a community service project.
7. Demonstrate effective communication skills with others.
8. Participate in a shadowing activity.
9. Identify components of an employment portfolio.
10. Demonstrate proficiency in program competencies.
11. Explore what is ethical in the workplace or school.
  1. State the SkillsUSA motto.



2. State the SkillsUSA creed.
3. Learn the SkillsUSA colors.
4. Describe the official SkillsUSA dress.
5. Describe the procedure for becoming a SkillsUSA officer.

Objective 2 Display a professional attitude toward the instructor and peers.



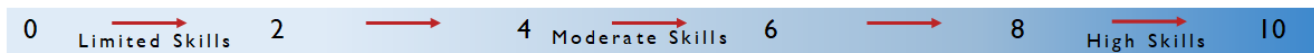
## Basic Digital Photography Performance Standards (Optional)

Performance assessments may be completed and evaluated at any time during the course. The following performance skills are to be used in connection with the associated standards and exam. To pass the performance standard the student must attain a performance standard average of **8 or higher** on the rating scale. Students may be encouraged to repeat the objectives until they average **8 or higher**.

Students Name \_\_\_\_\_

Class \_\_\_\_\_

### PERFORMANCE RATING SCALE



#### STANDARD 2 Process of “Workflow”

Score:

- Identify the multi-step process of workflow in *Image capture*:
  - Check settings (mode, memory card, battery, etc.)
  - Holding the camera (steady, shoot, and format)
  - Compose for desired effect
  - Focus (auto or manual)
  - Exposure (auto or manual, aperture and shutter priority)
  - Flash (on or off)
  - Taking the picture
  - Checking your results
- Identify the multi-step process of workflow as it relates to *Image editing*:
  - Image transfer (downloading files to a computer)
  - Image management (organizing files, photo selection and managing folders)
  - Primary image editing (straighten, rotate, limited crop, adjust tonal range, contrast, and color correction)
- Identify the multi-step process of workflow as it relates to image output size/resolution for intended purpose (web, presentation or print)
- Apply and modify this multi-step process or steps to develop and apply your own digital workflow

#### STANDARD 3 Digital Cameras

Score:

- Identify the necessary equipment used to download images
- Demonstrate effective camera operation including the use of basic accessories (tripod, external flash, cable release, etc.)

#### STANDARD 4 Camera Controls on a Digital Camera

Score:

- Demonstrate an understanding of basic mode settings (macro, sports, landscape, and portrait)

#### STANDARD 5 Memory Devices and File Types

Score:

- Determine the appropriate file size type for a specific end use



**STANDARD 7 Adobe Workshop**

**Score:**

- Evaluate image quality and determine if a file is suitable for further editing
- Demonstrate the use of software by editing images appropriately
- Produce a digital print for an exhibition

**STANDARD 8 Elements of Composition**

**Score:**

- Demonstrate an understanding of basic principles of composition including:
  - Simplicity
  - Rule of thirds
  - Point of view
  - Leading lines

**PERFORMANCE STANDARD AVERAGE SCORE:**