

# Basic Digital Photography

Students will have knowledge of the history of photography. **1**

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**1 History of Photography** 1.1.1

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**2 History of Digital Photography** 1.1.2

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**3 Brief history of Adobe Photoshop.** 1.1.3

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**4. Introduction to Digital Photography.** 1.1.4

- a Differences in film and digital photography (how they record images) 1.1.4.A
  - b How light works in photography (primary colors of light) 1.1.4.B
  - c Demonstrate an understanding of how pixels are used in digital photography 1.1.4.C
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Students will be able to understand and apply the multi-step process of “workflow”. **2**

**1 Identify the multi-step process of workflow in image capture.** 2.1

- a Check settings (mode, memory card, battery, etc.) 2.1.A
  - b Holding the camera (steady, shoot, and format) 2.1.B
  - c Composition 2.1.C
  - d Focus (auto or manual) 2.1.D
  - e Exposure (auto or manual – aperture and shutter priority) 2.1.E
  - f Light metering 2.1.F
  - g Flash (on or off) 2.1.G
  - h Capturing the image 2.1.H
  - i Verify correct exposure or adjust and reshoot (histogram, overexpose, underexposed) 2.1.I
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**2 Identify the multi-step process of workflow as it relates to image editing.** 2.2

- a Image transfer (downloading files to a computer) 2.2.A
- b Image management (organizing files, photo selection, and managing folders) 2.2.B
- c Create a contact sheet (using any of the following programs: Photoshop, Lightroom, Bridge) 2.2.C
- d Basic image editing (straighten, rotate, limited crop, adjust tonal range, contrast, and color correction) 2.2.D

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**3 Identify the multi-step process of workflow as it relates to image output. 2.3**

- a Size/resolution for intended purpose (web, presentation or print) 2.3.A
  - b Cloud storage (Dropbox, Google Drive, Web Services) 2.3.B
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Students will be able to identify different types of digital cameras, the location of their basic components, and the benefits and drawbacks of each type. 3

**1 Mobile devices/action cameras (camera phones, tablets, GoPro). 3.1**

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**2 Digital point and shoot cameras. 3.2**

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**3 Digital single-lens reflex (DSLR) cameras. 3.3**

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**4 Mirrorless inter-changeable lens cameras (MILC). 3.4**

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Students will demonstrate the appropriate use of the camera controls on a digital camera. 4

**1 Exposure modes (auto, shutter priority, aperture priority, program, manual). 4.1**

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**2 Pre-programmed modes (landscape, action, portrait, macro, night). 4.2**

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Students will be able to use and identify memory devices and file types associated with digital cameras and scanners. 5

**1 Demonstrate an understanding of digital file formats as they pertain to image capture (i.e. RAW, TIFF, JPEG). 5.1**

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**2 Demonstrate an understanding of compression in digital file sizes as they pertain to image capture (i.e. extra fine, fine, basic, and normal). 5.2**

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**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). 5.3**

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**4 Identify common memory cards and camera compatibilities (I.e. Compact Flash, SD, Micro SD, XD, and internal storage). 5.4**

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**5 Identify necessary equipment used for downloading images to a computer (i.e. cables, card readers). 5.5**

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**6 Properly download files from the camera computer. 5.6**

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**7 Demonstrate an understanding of how to scan an image for use with a computer (flatbed scanner, film scanner, negative scanner). 5.7**

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Students will be able to understand and operate a point and shoot camera or DSLR. 6

**1 Identify basic digital camera parts and their functions (i.e. viewfinder or LCD monitor, lens, mode dial, shutter release, etc.). 6.1**

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**2 Understand focal length and optical versus digital zoom. 6.2**

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**3 Use of a tripod or other steady shoot method when it is appropriate. 6.3**

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**4 Identify the need and appropriate use of an on-camera flash. 6.4**

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**5 Identify the difference between shutter priority and aperture priority.** 6.5

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**6 Identify some of the basic differences between digital Point and Shoot and DSLR cameras (i.e. size, weight, and lens options).** 6.6

a Camera memory buffer 6.6.A

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**7 Identify differences in types of photographic lenses for a DSLR (Wide 10-35mm, Standard 50-70mm, Telephoto 80mm and above).** 6.7

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**Students will be able to demonstrate basic proficiency in the use of Adobe Photoshop.** 7

**1 Demonstrate how to use Photoshop to set size and resolution for images based on the intended use of the image (web, print).** 7.1

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**2 Demonstrate tonal adjustments (i.e. histogram, Brightness and Contrast, Shadow/Highlight correction, Levels, Dodge and Burn Tool).** 7.2

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**3 Demonstrate color correction (i.e. color balance, hue/saturation, and levels).** 7.3

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**4 Demonstrate cropping (i.e. cropping, straightening, and perspective).** 7.4

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**5 Demonstrate techniques for photo retouching (i.e. healing brushes, red eye, clone stamp).** 7.5

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**6 Demonstrate and use the Layers pallet (i.e. active layer, layer order, creating and deleting layers, and Opacity).** 7.6

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**7 Demonstrate the black and white conversion process in Photoshop.** 7.7

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**8 Demonstrate effective use of undo and redo (i.e. history pallet, step forward or backward).** 7.8

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**9 Demonstrate the use of the Transform tool (i.e. scale, rotate, skew, flip, and distort).** 7.9

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**10 Demonstrate the use of selection tools (i.e. marquee, lasso, magic wand, quick selection tool).** 7.10

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**11 Demonstrate different imaging file types and know their intended use (.psd .jpeg .png).** 7.11

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**Students will be able to understand and demonstrate the elements of composition.** 8

**1 Demonstrate Simplicity/Emphasis as an element of composition.** 8.1

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**2 Demonstrate Rule of Thirds as an element of composition.** 8.2

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**3 Demonstrate Perspective as an element of composition (worms-eye, birds-eye)** 8.3

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**4 Demonstrate Leading Lines as an element of composition.** 8.4

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**Students will be able to understand and practice copyright laws, ethics and legal issues dealing with photography as identified in United States Code Title 17 Chapter 1 Section 101.** 9

**1 Define copyright.** 9.1

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**2 Other definitions:** 9.2

- a Audiovisual works 9.2.A
  - b Computer program 9.2.B
  - c Copies 9.2.C
  - d Copyright owner 9.2.D
  - e Digital Transmission 9.2.E
  - f Financial gain 9.2.F
  - g Pictorial, graphic, and sculptural works 9.2.G
  - h Works of visual art 9.2.H
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**3 Practice ethics and rules governing photojournalism (i.e. Editorial content must not be changed).** 9.3

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**4 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).** 9.4

- a Time limitations 9.4.A
  - b Portion limitations 9.4.B
  - c Text material 9.4.C
  - d Illustrations and photographs 9.4.D
  - e Copying and distribution limitations 9.4.E
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**5 Demonstrate understanding of ethics related to social and legal issues in subject choice (i.e. model releases, image appropriateness, and cultural sensitivity).** 9.5

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**Students will gain an understanding of the careers available in the field of photography.** 10

**1 Cover the possible career options in the field of photography.** 10.1

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**Students will understand the importance of career readiness skills as it relates to the workplace and outlined in the SkillsUSA Framework – Level 1.** 11

**1 Understand and demonstrate the attitude of cooperation.** 11.1

- a Develop awareness of cultural diversity and equality issues. 11.1.A
- b Demonstrate effective communication with others. 11.1.B
- c Apply team skills to a group project. 11.1.C
- d Identify and apply conflict resolution skills. 11.1.D

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**2 Understand and demonstrate the ability of being resourceful and innovative.** 11.2

- a Discover self-motivation techniques and establish short-term goals. 11.2.A
- b Measure/modify short-term goals. 11.2.B
- c Review a professional journal and develop a three- to five-minute presentation. 11.2.C

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**3 Plan for your future career.** 11.3

- a Complete a self-assessment and identify individual learning styles. 11.3.A
- b Define future occupations. 11.3.B
- c Identify the components of an employment portfolio. 11.3.C
- d List proficiency in program competencies. 11.3.D
- e. Complete a survey for employment opportunities. 11.3.E
- f Create a job application. 11.3.F
- g Assemble your employment portfolio. 11.3.G
- h Employability skills: evaluate program comprehension. 11.3.H

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**4 Understand and demonstrate the ability to manage a project.** 11.4

- a. Apply team skills to a group project. 11.4.A
- b Observe and critique a meeting. 11.4.B
- c Demonstrate business meeting skills. 11.4.C
- d Explore supervisory and management roles in an organization. 11.4.D
- e Identify and apply conflict resolution skills. 11.4.E
- f Demonstrate evaluation skills. 11.4.F
- g Manage a project and evaluate others. 11.4.G