Utah CTE

Basic Digital Photography

Students will have knowledge of the history of photography. 1

1 **History of Photography** 1.1.1

2 **History of Digital Photography** 1.1.2

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

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

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

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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dentify 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
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
	2 Digital point and shoot cameras. 3.2
	3 Digital single-lens reflex (DSLR) cameras. 3.3
	4 Mirrorless inter-changeable lens cameras (MILC). 3.4
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
	2 Pre-programmed modes (landscape, action, portrait, macro, night). 4.2
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
	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
	3 Demonstrate and 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
	4 Identify common memory cards and camera compatibilities (I.e. Compact Flash, SD, Micro SD, XD, and internal storage). 5.4
	5 Identify necessary equipment used for downloading images to a computer (i.e. cables, card readers). 5.5
	6 Properly download files from the camera computer. 5.6
	7 Demonstrate an understanding of how to scan an image for use with a computer (flatbed scanner, film scanner, negative scanner). 5.7
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
	2 Understand focal length and optical versus digital zoom. 6.2
	3 Use of a tripod or other steady shoot method when it is appropriate. 6.3
	4 Identify the need and appropriate use of an on-camera flash. 6.4
	dentify 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
	7 **Identify differences in types of photographic lenses for a DSLR (Wide 10-35mm, Standard 50-70mm, Telephoto 80amm and above).** 6.7
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
	2 **Demonstrate tonal adjustments (i.e. histogram, Brightness and Contrast, Shadow/Highlight correction, Levels, Dodge and Burn Tool).** 7.2
	3 **Demonstrate color correction (i.e. color balance, hut/saturation, and levels).** 7.3
	4 **Demonstrate cropping (i.e. cropping, straightening, and perspective).** 7.4
	5 **Demonstrate techniques for photo retouching (i.e. healing brushes, red eye, clone stamp).** 7.5
	6 **Demonstrate and use the Layers pallet (i.e. active layer, layer order, creating and deleting layers, and Opacity).** 7.6
	7 **Demonstrate the black and white conversion process in Photoshop.** 7.7
	8 **Demonstrate effective use of undo and redo (i.e. history pallet, step forward or backward).** 7.8
	9 **Demonstrate the use of the Transform tool (i.e. scale, rotate, skew, flip, and distort).** 7.9
	10 **Demonstrate the use of selection tools (i.e. marquee, lasso, magic wand, quick selection tool).** 7.10
	11 **Demonstrate different imaging file types and know their intended use (.psd .jpeg .png).** 7.11
Students will be able to understand and demonstrate the elements of composition. 8	1 **Demonstrate Simplicity/Emphasis as an element of composition.** 8.1
	2 **Demonstrate Rule of Thirds as an element of composition.** 8.2
	3 **Demonstrate Perspective as an element of composition (worms-eye, birds-eye)** 8.3
	4 **Demonstrate Leading Lines as an element of composition.** 8.4
Stu un copyright laws, ethics	**efine copyright.** 9.1
	2 **Other definitions:** 9.2

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and legal issues dealing with photography as identified in United States Code Title 17 Chapter 1 Section 101. 9

- 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

3 **Practice ethics and rules governing photojournalism (i.e. Editorial content must not be changed).** 9.3

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

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

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

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

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

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

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