

STRANDS AND STANDARDS

BASIC DIGITAL PHOTOGRAPHY



Course Description

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 Advanced Commercial Photography course.

CAMERA REQUIREMENT

It is recommended that students have access to a Digital SLR camera. However Digital Point and Shoot cameras can be used and will be covered in this course.

Minimum equipment requirements for this course are cameras with removable memory cards and adjustable mode settings. Mobile devices may be used to complete some, but not all of the listed objectives.

SOFTWARE REQUIREMENT

Photoshop or Photoshop Elements, Adobe Lightroom



Intended Grade Level	10-12
Units of Credit	0.5
Core Code	40.13.00.00.012
Concurrent Enrollment Core Code	40.13.00.13.012
Prerequisite	None
Skill Certification Test Number	537
Test Weight	0.5
License Type	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Commercial Photography
Endorsement 2	N/A
Endorsement 3	N/A

STRAND 1

Students will have knowledge of the history of photography.

Standard 1

History of Photography.

Standard 2

History of Digital Photography.

Standard 3

Brief history of Adobe Photoshop.

Standard 4

Introduction to Digital Photography.

- Differences in film and digital photography (how they record images)
- How light works in photography (primary colors of light)
- Demonstrate an understanding of how pixels are used in digital photography

STRAND 2

Students will be able to understand and apply the multi-step process of “workflow”.

Standard 1

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

- Check settings (mode, memory card, battery, etc.)
- Holding the camera (steady, shoot, and format)
- Composition
- Focus (auto or manual)
- Exposure (auto or manual – aperture and shutter priority)

- Light metering
- Flash (on or off)
- Capturing the image
- Verify correct exposure or adjust and reshoot (histogram, overexpose, underexposed)

Standard 2

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)
- Create a contact sheet (using any of the following programs: Photoshop, Lightroom, Bridge)
- Basic image editing (straighten, rotate, limited crop, adjust tonal range, contrast, and color correction)

Standard 3

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

- Size/resolution for intended purpose (web, presentation or print)
- Cloud storage (Dropbox, Google Drive, Web Services)

Performance Skill

Understand and apply the multi-step process of “workflow”.

- Identify the multi-step process of workflow in *image capture*.
- Identify the multi-step process of workflow as it relates to *image editing*.
- Identify the multi-step process of workflow as it relates to *image output*.

STRAND 3

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.

Standard 1

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

Standard 2

Digital point and shoot cameras.

Standard 3

Digital single-lens reflex (DSLR) cameras.

Standard 4

Mirrorless inter-changeable lens cameras (MILC).

Performance Skill

Identify different types of digital cameras, the location of their basic components, and the benefits and drawbacks of each type.

- Mobile devices/action cameras (camera phones, tablets, GoPro).
- Digital point and shoot cameras.
- Digital single-lens reflex (DSLR) cameras.
- Mirrorless inter-changeable lens cameras (MILC).

STRAND 4

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

Standard 1

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

Standard 2

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

Performance Skill

Demonstrate the appropriate use of the camera controls on a digital camera.

- Exposure modes (auto, shutter priority, aperture priority, program, manual).
- Pre-programmed modes (landscape, action, portrait, macro, night).

STRAND 5

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

Standard 1

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

Standard 2

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

Standard 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).

Standard 4

Identify common memory cards and camera compatibilities (i.e. Compact Flash, SD, Micro SD, XD, and internal storage).

Standard 5

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

Standard 6

Properly download files from the camera computer.

Standard 7

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

Performance Skill

Use and identify memory devices and file types associated with digital cameras and scanners.

- Demonstrate an understanding of digital file *formats* as they pertain to image capture (i.e. RAW, TIFF, JPEG).
- Demonstrate an understanding of compression in digital file *sizes* as they pertain to image capture (i.e. extra fine, fine, basic, and normal).
- 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).
- Identify common memory cards and camera compatibilities (i.e. Compact Flash, SD, Micro SD, XD, and internal storage).
- Identify necessary equipment used for downloading images to a computer (i.e. cables, card readers).
- Properly download files from the camera computer.
- Demonstrate an understanding of how to scan an image for use with a computer (flatbed scanner, film scanner, negative scanner).

STRAND 6

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

Standard 1

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

Standard 2

Understand focal length and optical versus digital zoom.

Standard 3

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

Standard 4

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

Standard 5

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

Standard 6

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

- Camera memory buffer

Standard 7

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

Performance Skill

Understand and operate a point and shoot camera or DSLR.

- Identify basic digital camera parts and their functions (i.e. viewfinder or LCD monitor, lens, mode dial, shutter release, etc.).
- Understand focal length and optical versus digital zoom.
- Use of a tripod or other steady shoot method when it is appropriate.
- Identify the need and appropriate use of an on-camera flash.
- Identify the difference between *shutter* priority and *aperture* priority.
- Identify some of the basic differences between digital Point and Shoot and DSLR cameras (i.e. size, weight, and lens options).

STRAND 7

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

Standard 1

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

Standard 2

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

Standard 3

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

Standard 4

Demonstrate cropping (i.e. cropping, straightening, and perspective).

Standard 5

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

Standard 6

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

Standard 7

Demonstrate the black and white conversion process in Photoshop.

Standard 8

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

Standard 9

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

Standard 10

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

Standard 11

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

Performance Skill

Demonstrate basic proficiency in the use of Adobe Photoshop.

- Demonstrate how to use Photoshop to set size and resolution for images based on the intended use of the image (web, print).
- Demonstrate tonal adjustments (i.e. histogram, Brightness and Contrast, Shadow/Highlight correction, Levels, Dodge and Burn Tool).
- Demonstrate color correction (i.e. color balance, hue/saturation, and levels).
- Demonstrate cropping (i.e. cropping, straightening, and perspective).
- Demonstrate techniques for photo retouching (i.e. healing brushes, red eye, clone stamp).
- Demonstrate and use the Layers pallet (i.e. active layer, layer order, creating and deleting layers, and Opacity).
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- Demonstrate effective use of *undo* and *redo* (i.e. history pallet, step forward or backward).
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- Demonstrate the use of selection tools (i.e. marquee, lasso, magic wand, quick selection tool).
- Demonstrate different imaging file types and know their intended use (.psd .jpeg .png).

STRAND 8

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

Standard 1

Demonstrate Simplicity/Emphasis as an element of composition.

Standard 2

Demonstrate Rule of Thirds as an element of composition.

Standard 3

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

Standard 4

Demonstrate Leading Lines as an element of composition.

Performance Skill

Understand and demonstrate the elements of composition.

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

STRAND 9

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.

Standard 1

Define copyright.

Standard 2

Other definitions:

- Audiovisual works
- Computer program
- Copies
- Copyright owner
- Digital transmission
- Financial gain
- Pictorial, graphic, and sculptural works
- Works of visual art

Standard 3

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

Standard 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).

- Time limitations
- Portion limitations
- Text material
- Illustrations and photographs
- Copying and distribution limitations

Standard 5

Demonstrate understanding of ethics related to social and legal issues in subject choice (i.e. model releases, image appropriateness, and cultural sensitivity).

STRAND 10

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

Standard 1

Cover the possible career options in the field of photography.

STRAND 11

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

Standard 1

Understand and demonstrate the attitude of cooperation.

- Develop awareness of cultural diversity and equality issues.
- Demonstrate effective communication with others.
- Apply team skills to a group project.
- Identify and apply conflict resolution skills.

Standard 2

Understand and demonstrate the ability of being resourceful and innovative.

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

Standard 3

Plan for your future career.

- Complete a self-assessment and identify individual learning styles.
- Define future occupations.
- Identify the components of an employment portfolio.
- List proficiency in program competencies.
- Complete a survey for employment opportunities.
- Create a job application.
- Assemble your employment portfolio.
- Employability skills: evaluate program comprehension.

Standard 4

Understand and demonstrate the ability to manage a project.

- Apply team skills to a group project.
- Observe and critique a meeting.
- Demonstrate business meeting skills.
- Explore supervisory and management roles in an organization.
- Identify and apply conflict resolution skills.
- Demonstrate evaluation skills.
- Manage a project and evaluate others.

Skill Certificate Test Points by Strand

Test Name	Test #	Number of Test Points by Strand											Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10	11		
Basic Digital Photography	537	6	4	4	11	3	12	20	4	1	1	1	67	61