

Strands & 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

License Type

CTE and/or
Secondary Education 6-12

Required Endorsement

Commercial Photography

Intended Grade Level: 10-12

Units of Credit: 0.5

Core Code: 40.13.00.00.012

CE Core Code: 40.13.00.13.012

Prerequisite: None

Skill Certification: 537

Test Weight: 0.5

Strands & Standards

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)

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).

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).

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).

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).

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 the 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 Select tool).
- Standard 11** 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.

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
 - Work 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 Student will gain and 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 develop an understanding of professional skills needed for the workplace through the SkillsUSA PDP program.

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

- Complete a self-assessment inventory and identify individual learning styles.
- Discover self-motivation techniques and establish short-term goals.
- Determine individual time-management skills.
- Define future occupations.
- Define awareness of cultural diversity and equity issues.
- Recognize the benefits of conducting a community service project.
- Demonstrate effective communication skills with others.
- Participate in a shadowing activity.
- Identify components of an employment portfolio.
- Demonstrate proficiency in program competencies.
- Explore what is ethical in the workplace or school.
- Master a working knowledge of SkillsUSA
 - State the SkillsUSA motto.
 - State the SkillsUSA creed.
 - Learn the SkillsUSA colors.
 - Describe the official SkillsUSA dress.
 - Describe the procedure for becoming a SkillsUSA officer.

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

* SkillsUSA PDP requirements – Recommended.

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

Performance Objectives