



Multiple Category Scope and Sequence: Scope and Sequence Report For Course Standards and Objectives, Content, Skills, Vocabulary

Wednesday, August 20, 2014, 1:30PM



	Unit	Course Standards and Objectives	Content	Skills	Vocabulary
<p>District Basic Basic Digital Photography (05.0407) (District) 2014-2015 Collaboration</p>	<p>1. Intro: Careers & History of Digital Photo (Week 1, 3 Weeks)</p>	<p>UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 01 Students will develop an awareness of career opportunities in digital photography and an overview of the history of photography.</p> <ul style="list-style-type: none"> Objective 0101 Develop career awareness related to working in the photography industry. Objective 0102 History of Photography Objective 0103 History of Digital Photography Objective 0104 Introduction to Digital Photography 	<ul style="list-style-type: none"> Be able to communicate an idea or feeling using photography. What type of jobs there are in photography. How digital photography is progressing. 	<ul style="list-style-type: none"> Recognize the jobs that are available and be able to plan a path to achieve their photo goals. Relate changes in photographic equipment Be able to describe in general how a digital camera works 	<ul style="list-style-type: none"> Digital Camera Single lens reflex Viewfinder Zoom lens Monitor Resolution Pixel Sensors Digital file Bitmap Ink jet and laser printers
	<p>Basic Digital Photography (Week 1, 1 Week)</p> <p>2. Workflow: Multi-step process (Week 5, 5 Weeks)</p>	<p>UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 02 Students will be able to understand and apply the multi-step process of "workflow".</p> <ul style="list-style-type: none"> Objective 0201 Identify the multi-step process of workflow in Image capture. <ol style="list-style-type: none"> 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) 	<p>Proper order for making correct exposure, clarity, and composition</p> <p>Evaluate primary results and make corrections</p> <p>Correct process for image transfer to computer/network folder system</p> <p>Image adjustment to meet print and web standards</p>	<p>Demonstrate proper camera use and</p> <p>Produce acceptable images and assess to be production ready</p>	<p>workflow</p> <p>image capture</p> <p>memory card</p> <p>Mode dial (Aperture-Shutter-Manual-Program, Auto)</p> <p>format</p> <p>focus</p> <p>exposure</p>

- g. Taking the picture
- h. Checking your results
- Objective 0202
Identify the multi-step process of workflow as it relates to Image editing.
 - a. Image Transfer (downloading files to a computer)
 - b. Image Management (organizing files, photo selection and managing folders)
 - c. Image Editing (Straighten, rotate, limited crop, adjust tonal range, contrast, and color correction)
- Objective 0203
Identify the multi-step process of workflow as it relates to Image output.
 - a. Size/Resolution for intended purpose. (web, presentation or print)
- Objective 0204
Apply and modify this multi-step process or steps to develop and apply your own digital workflow.

image transfer

output

files

folders



crop

tonal range

contrast

color correction/mode (RGB/CMYK)

resolution pixels (web press)

3. Digital Camera: Types, components, & benefits  (Week 3, 3 Weeks) 

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 03
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.

There are different cameras for different jobs.

Compare benefits of each camera type decide the camera for the job

Cameras have controls so you can be creative.

- Objective 0301
Camera Phones and PDA Cameras
- Objective 0302
Digital Point and Shoot cameras.
- Objective 0303
Digital Single-Lens Reflex (SLR) cameras.
- Objective 0304
Digital Professional/Studio cameras.

PDA Cameras

Digital point N Shoot Cameras

Digital Single-lens Reflex Cameras

Digital Professional camera (medium & large format)

Studio camera

mode dial

hot shoe (flash)

Tripod/Monopod

Image quality (L,M,S,

4. Digital Cameral:

Controls (Week 4, 3 Weeks)

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 04
Students will demonstrate the appropriate use of the camera controls on a digital camera.

- Objective 0401
Focusing and memory buffer delay
- Objective 0402
Exposure Modes (Auto, Shutter Priority, Aperture Priority, Programmed Exposure, Manual, and Continuous).

Cameras have controls to control proper exposure

Shutter

- opens and closes to control how long the light comes in
- controls action or motion

Aperture

- opening controls how much light enters camera
- controls depth of field or how much is in focus

Manipulate the mode dial to execute a proper exposure and produce desired results

Raw)

Metering

Exposure Modes:

Auto mode

Shutter priority mode

Aperture Priority mode

Programmed Exposure mode

Manual mode

Continuous mode

Buffering

Focus/Auto

shutter speed

aperture - f/stop

Memory devices

File types

Scanners

Pixels

Digital file

Image capture

RAW

TIFF

JPEG

5. Digital Memory Devices & File

Types (Week 5, 1 Week)

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 05
Students will be able to use and identify memory devices and file types associated with digital cameras and scanners.

- Objective 0501
Demonstrate an understanding of how pixels are used in digital photography.
- Objective 0502
Demonstrate an understanding of digital file formats as they pertain to image capture (i.e. RAW, TIFF, JPEG).
- Objective 0503
Demonstrate an understanding of compression in digital file sizes as they pertain to image capture (i.e. Extra Fine, Fine, Basic, and Normal)

Pixels in a digital photo are affected when we increase the photo size.

Importance of using the highest resolution picture when editing.

Data compression when saving a TIFF to a JPEG.

Common devices and procedures for image capture and transfer.

Camera resolution vs Print resolution.

Students will be able to use and identify memory devices and files types associated with digital cameras and scanners and demonstrate their proper use.

aperture - f/stop

Memory devices

File types

Scanners

Pixels

Digital file

Image capture

RAW

TIFF

JPEG

- Objective 0504
Demonstrate an understanding of the difference between High and Low Resolution and how they are linked to Pixelization
- Objective 0505
Identify common memory cards and camera compatibilities. (i.e. Compact Flash, Secure Digital, Sony Memory Stick, Compact Disk, and internal storage)
- Objective 0506
Identify necessary equipment used for downloading images (i.e. cables, card readers, or drives)
- Objective 0507
Properly download files from the camera or scanner to a computer

Compression
Resolution
memory cards
compatibilities
compact Flash (cf)
Secure Digital (sd)
Sony Memory Stick
Compact Disk
Internal storage
cables
card readers
drives

6. Digital Camera

Parts & Use

(Week 4, 16 Weeks) 

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 06
Students will be able to understand and perform camera work.

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Classify camera types and manipulate controls and accessories to produce correctly exposed digital images. Demonstrate knowledge of when to integrate advanced features and equipment.

Viewfinder
LCD monitor
Lens

- Objective 0601
Identify basic digital camera parts and their functions (i.e. viewfinder or LCD monitor, lens, mode dial, shutter button, etc.).
- Objective 0602
Understand focal length and identify appropriate lens for specific needs (i.e. wide angle, normal, telephoto, and optical verses digital zoom).
- Objective 0603
Use of a tripod or other steady shoot method when it is appropriate.
- Objective 0604
Identify the need and appropriate use for a flash.

Identify and operate basic digital camera parts

Understand and use physical camera functions and features

Understand lens types for specific needs

Understand and use of accessories including tripod, flash, etc

Know when to select Shutter Priority or Aperture Priority mode.

mode dial
shutter button
Focal length
Wide angle
telephoto
Optical zoom vs digital zoom
tripod

- Objective 0605
Identify the difference between Shutter Priority and Aperture Priority. shutter priority
- Objective 0606
Identify some of the basic differences between digital Point and Shoot and digital SLR cameras (i.e. size, weight, and lens options) Aperture priority
Digital point n shoot
Digital SLR cameras

7. Digital Files: Image size &

Resolution

(Week 6, 1 Week)

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 07
Students will be able to adjust size and set resolution of downloaded images.

Size and resolution of image for web based use. 72 ppi

Size and resolution of image for printing. 300 ppi

Modify image size and resolution to generate images ready for web or print.

Photoshop

Resolution

- Objective 0701
Demonstrate how to use Photoshop to set size and resolution for images based on the intended use of the image.

How digital cropping affects image resolution.

8. Photoshop: Interface & Use

(Week 8, 11 Weeks)

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 08
Students will be able to demonstrate basic proficiency in the use of Adobe Photoshop.

Understand different elements of Photoshop by making exposure corrections using tonal adjustments and color correction

Using image the Enhancement tools: cropping, brushes, filters, clone & patch,

Demonstrate the black and white conversion process

Demonstrate proficiency by using the Layers pallet, transform and selection tools and the effective use of the Undo and Redo

Create a contact sheet or index print

Demonstrate increasing proficiency with Photoshop application by producing corrected and enhanced images through the use of exposure correction, image enhancement and the use of essential controls and panel adjustments.

Contact sheet

Index print

tonal adjustment

histogram

Shadow/Highlight correction

Levels

Dodge

Burn tool



Hue

Saturation

Cropping

- Objective 0801
Create a contact sheet or index print using Photoshop
- Objective 0802
Demonstrate tonal adjustments (i.e. histogram, Brightness and Contrast, Shadow/Highlight correction, Levels, Dodge and Burn Tool)
- Objective 0803
Demonstrate color correction (i.e. variations, color balance, hue /saturation, and levels)
- Objective 0804
Demonstrate cropping (i.e. cropping, print sizing, straightening, and perspective)
- Objective 0805
Demonstrate techniques for

	improving images (i.e. Healing Brushes, Patch Tool, Clone Stamp and Sharpening Filter).		Healing brushes
▪	Objective 0806 Demonstrate and use the Layers pallet (i.e. active layer, layer order, creating and deleting layers, and Opacity).		Patch tool
▪	Objective 0807 Demonstrate the black and white conversion process (i.e. Hue/Saturation, and Grayscale mode)		Clone stamp
▪	Objective 0808 Demonstrate effective use of the Undo and Redo (i.e. history pallet, step forward or backward).		Sharpening filter
▪	Objective 0809 Demonstrate the use of the Transform tool (i.e. scale, rotate, skew, flip, and distort).		Layer pallet
▪	Objective 0810 Demonstrate the use of selection tools (i.e. Marquee, Lasso, Magic Wand, adding and subtracting to or from the selection)		Active layer
			Opacity
			Grayscale mode
			Transform tool
			Scale
			Rotate
			Skew

9. Elements of Composition 
(Week 6, 3 Weeks) 

UT: CTE: Skilled and Technical Sciences, UT: Grades 9-12, Basic Digital Photography Standard 09 Students will be able to understand and demonstrate the elements of composition	The subject of the image should be place in areas that are pleasing to look at.	Demonstrate the ability to compose images using rules of composition.	Simplicity
▪ Objective 0901 Demonstrate Simplicity/Emphasis as an element of composition			Emphasis
▪ Objective 0902 Demonstrate Rule of Thirds as an element of composition	Compose your images more in the camera than on the computer.	Draw on different types of composition to enhance quality of image.	Rule of Thirds
▪ Objective 0903 Demonstrate Point of View as an element of composition			Leading lines
▪ Objective 0904 Demonstrate Leading Lines as an element of composition	When to use the different types of composition	Produce images with a variety of camera angles.	Point of View
			Angle of View
			Area of Impact

10. Digital Image

Output  (Week 12,
3 Weeks) 

UT: CTE: Skilled and Technical Sciences,
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Photography
Standard 10
Students will be able to display digital
images in printed and electronic output.

- Objective 1001
Prepare an image for output (i.e. image size, canvas size and resolution) – printed to page or electronic publication.
- Objective 1002
Evaluate/critique photographic work.

Size and resolution of image for web and printing.

How digital cropping affects image resolution.

Making exposure corrections and enhancements.

Demonstrate the black and white conversion process.

Image quality including focus, crop, and composition.

Demonstrate proficiency with Photoshop application by submitting corrected and enhanced images ready for output to print or web.

output

Canvas size

Critique Photographic work

11. Copyright Laws

& Ethics  (Week 2,
2 Weeks) 

UT: CTE: Skilled and Technical Sciences,
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Photography
Standard 11
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.

- Objective 1101
Define copyright.
- Objective 1102
Other definitions.
 - a. Audiovisual works.
 - b. Computer program.
 - c. Copies.
 - d. Copyright owner.
 - e. Digital transmission.
 - f. Financial gain.
 - g. Pictorial, graphic, and sculptural works.
 - h. Work of visual art.
- Objective 1103
Students will practice ethics and rules governing photojournalism (i.e. Editorial content must not be changed)
- Objective 1104
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)
 - a. Time limitations.

Students will learn:

--what can and can't be copyrighted

--when photo manipulation is permissible

--how to use images without violating another photographer's copyright

--how to copyright their own digital images

--how to shoot photos in an ethical manner

Students will be able to understand copyright laws, ethics and legal issues regarding photography.

Students will practice ethics and rules governing copyrights and usage.

Students will practice ethics and rules governing photojournalism.

Students will demonstrate understanding of ethics related to social and legal issues in selecting photo subjects.

copyright

digital transmission

reproduce

manipulate

distribute

plagiarize

exhibit

photojournalism

editorial content

- b. Portion limitations.
- c. Text material.
- d. Illustrations and photographs.
- e. Copying and distribution limitations.
- Objective 1105
Students will demonstrate understanding of ethics related to social and legal issues in subject choice (i.e. model releases, image appropriateness, and cultural sensitivity)

12. Professional Development

(Week 16, 4 Weeks)  

UT: CTE: Skilled and Technical Sciences,
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Photography
Standard 12

The student will understand the need for professional development.

- Objective 1201
Complete a personal inventory.
- Objective 1202
Set and meet goals.
- Objective 1203
Be self-motivated.
- Objective 1204
Know how to make decisions.
- Objective 1205
Know how to manage time.
- Objective 1206
Organize personal belongings and lab equipment.
- Objective 1207
Learn to communicate verbally.
- Objective 1208
Write effective communications.
- Objective 1209
Establish a personal reading program.
- Objective 1210
Develop effective work skills and attitudes.

Standard 13

The student will understand the need for leadership skills.

- Objective 1301
Serve on a committee.

Build photo portfolio

Self motivation technique

Learn to set goals and keep commitments

Be involved in community project

Personal skills including organization, communication, & career

Leadership and management skills

Pursuing and planning career employment pathways & opportunities

Awareness of best practices for employability

Desired skills and work habits

Develop Personal communication and organizational skills

Practice Leadership and management techniques

Planning for career and employment opportunities

Personal inventory

goals

self-motivated

manage time

personal belongings

lab equipment

communicate verbally

effective communication

personal reading program

effective work skill

- Objective 1302
Prepare an agenda.
- Objective 1303
Assist in planning a meeting.
- Objective 1304
Review basic parliamentary procedure.
 - a. Make a main motion.
- Objective 1305
Participate in a school project.
- Objective 1306
Attend a community meeting.
- Objective 1307
Practice effective speaking.
- Objective 1308
Present a three- to five-minute talk.
- Objective 1309
Implement a leadership project.

Standard 14

The student will understand the need for career planning.

- Objective 1401
Define your future occupation.
- Objective 1402
Survey employment opportunities.
- Objective 1403
Report on a trade journal article.
- Objective 1404
Explore opportunities for advanced training.
- Objective 1405
Conduct a worker interview.
- Objective 1406
Contact a professional association.
- Objective 1407
Explore entrepreneurship opportunities.
- Objective 1408
Give a talk about your career.
- Objective 1409
Review career goals.

Standard 15

The student will understand the importance of employability and work habits.

- Objective 1501
Develop a list of work standards to follow at school and on the job.
- Objective 1502
Evaluate your personal ethics.
 - a. Evaluate your personal ethics against acceptable workplace ethics.
- Objective 1503
Build a job search network.
- Objective 1504
Find job leads.
- Objective 1505
Write a resume.
- Objective 1506
Create a job portfolio.
- Objective 1507
Complete a job application.
- Objective 1508
Write a business letter and memo.
- Objective 1509
Participate in an actual or simulated job interview.

CTE Testing 

(Week 16, 4 Weeks) 

 **testing sight**