Course Title: Digital Photography 1

Course Number: 8201310

Course Credit: 1

Course Description:

This course provides competencies in photographic history, the production process, intellectual property rights, camera systems, support equipment, basic photography and workflow applications.

Abbreviations:

FS-M/LA = Florida Standards for Math/Language Arts NGSSS-Sci = Next Generation Sunshine State Standards for Science

CTE S	standards and Benchmarks	FS-M/LA	NGSSS-Sci
04.0	Demonstrate understanding of the history of photographyThe student will be able to:		
	04.01 Demonstrate knowledge photography as an invention.		
	04.02 Demonstrate knowledge of early uses of photography.		
	04.03 Describe the mechanics of early photographic systems.		
	04.04 Identify photography as art.		
	04.05 Show the concept of the "decisive moment".		
	04.06 Demonstrate knowledge of pictorial photography		
	04.07 Demonstrate knowledge of straight photography.		
	04.08 Demonstrate knowledge of documentary photography.		
	04.09 Define aspects of photojournalism.		
05.0	Evaluate the production processThe student will be able to:		
	05.01 Identify the job titles associated with digital photography.		

CTE S	Standards and Benchmarks	FS-M/LA	NGSSS-Sci
	05.02 Identify various tools and equipment used in digital photography.		
	05.03 Use speed and efficiency concepts (workflow).		
	05.04 Identify the different types of the photographic medium such as photojournalism, fine art, event, family portrait, fashion, sports, magazine and product.		
	05.05 Identify the interrelationships between artists.		
	05.06 Use basic communication concepts such as verbal, memos, paperwork and purchase orders.		
	05.07 Identify the stages of production.		
	05.08 Examine photographic terms and jargon.		
	05.09 Create and organize contact sheets or prepare for presentations online and in person.		
06.0	Demonstrate understanding of intellectual property rights, copyright laws and plagiarism as it applies to creative assetsThe student will be able to:		
	06.01 Examine the limits and expectations of copyright protection.		
	06.02 Analyze the rights of "fair use" and "fair dealing".		
	06.03 Demonstrate understanding of the transfer and licensing of creative works.		
	06.04 Articulate the use of "exclusive rights" to intellectual creations.		
	06.05 Demonstrate the use of digital watermarking and embedding file information.		
07.0	Operate parts of a camera systemThe student will be able to:		
	07.01 Identify basic camera anatomy such as lens, battery, flash, shutter and display.		
	07.02 Remove and attach standard lenses.		
	07.03 Charge and connect batteries.		
	07.04 Identify, insert and format recording media.		
	07.05 Use basic camera functions such as power, date/ time and menu navigation.		
	07.06 Set image format and size.		
	07.07 Use camera auto, program and scene modes.		
	07.08 Use camera viewfinder and LCD displays for image review.		

07.09 Use basic lens control such as auto, manual focus and zoom. 07.10 Use image International Standards Organization (ISO) and metering functions. 07.11 Use white balance operations. 07.12 Use shutter and aperture priority modes. 07.13 Set proper f-stop and shutter speeds. 07.14 Use camera drive modes such as delayed, multiple and remote. 07.15 Operate a camera mounted flash and use fill and red-eye reduction. 08.0 Demonstrate use of camera support equipmentThe student will be able to: 08.01 Perform basic handholds of camera in portrait and landscape. 08.02 Identify basic components of a tripod (head, sticks and spreader). 08.03 Assemble fluid head and friction head tripod components. 08.04 Setup and level tripod for use in portrait and landscape. 08.05 Attach camera to support equipment. 08.06 Identify auxiliary support devices. 09.01 Apply camera care and maintenance principles.
07.11 Use white balance operations. 07.12 Use shutter and aperture priority modes. 07.13 Set proper f-stop and shutter speeds. 07.14 Use camera drive modes such as delayed, multiple and remote. 07.15 Operate a camera mounted flash and use fill and red-eye reduction. 08.0 Demonstrate use of camera support equipmentThe student will be able to: 08.01 Perform basic handholds of camera in portrait and landscape. 08.02 Identify basic components of a tripod (head, sticks and spreader). 08.03 Assemble fluid head and friction head tripod components. 08.04 Setup and level tripod for use in portrait and landscape. 08.05 Attach camera to support equipment. 08.06 Identify auxiliary support devices.
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09.01 Apply camera care and maintenance principles.
09.02 Define the subject of a photograph.
09.03 Identify available light sources.
09.04 Demonstrate understanding of photo composition (rule of thirds).
09.05 Select an appropriate lens for subject (wide, tight, macro).
09.06 Take still life photographs using available light.
09.07 Take portrait photographs using available light.
09.08 Take action photographs using available light.

CTE S	Standards and Benchmarks	FS-M/LA	NGSSS-Sci
	09.09 Create a series (picture study) of photographs around a defined subject.		
10.0	Use photographic workflow applicationsThe student will be able to:		
	10.01 Establish system requirements for workflow application software.		
	10.02 Install and configure workflow application software.		
	10.03 Identify parts of the software interface including menus and palettes.		
	10.04 Import photographs from various media sources such as CF, SD and DVD formats.		
	10.05 Define and create keyword tags for imported images.		
	10.06 Organize, rate, label and rename image collections.		
	10.07 Create and modify image metadata.		
	10.08 Perform image post processing including white balance, color, tone and crop.		
	10.09 Export images to disk or photo editing software.		
	10.10 Create and upload web gallery to online photo sharing sites.		

Course Title: Digital Photography 2

Course Number: 8201320

Course Credit: 1

Course Description:

This course covers competencies in developing a production plan, creative direction and computer skills.

Abbreviations:

FS-M/LA = Florida Standards for Math/Language Arts NGSSS-Sci = Next Generation Sunshine State Standards for Science

CTE S	Standards and Benchmarks	FS-M/LA	NGSSS-Sci
11.0	Develop a production planThe student will be able to:		
	11.01 Work with the client to define the scope of work.		
	11.02 Work with the client to identify the message.		
	11.03 Determine distribution requirements and client deliverables.		
	11.04 Identify the stages of production.		
	11.05 Create basic communication concepts verbally and through memos and paperwork.		
	11.06 Develop a production schedule.		
	11.07 Define roles and coordinate needed production crew.		
	11.08 Evaluate the scope and use of model releases.		
	11.09 Evaluate the scope and use of property releases.		
	11.10 Evaluate the scope and use of liability releases.		
	11.11 Identify need and use for production insurance.		

CTE S	Standards and Benchmarks	FS-M/LA	NGSSS-Sci
	11.12 Determine and secure equipment.		
	11.13 Examine industry terms and jargon.		
12.0	Demonstrate knowledge of art/ creative directionThe student will be able to:		
	12.01 Develop the overall visual appearance of a photograph/ video.		
	12.02 Demonstrate the ability to create moods with style.		
	12.03 Describe the importance of art direction as it pertains to the message to be conveyed.		
	12.04 Identify the use of color in art direction.		
	12.05 Document the technical aspects of the art direction for use in production.		
	12.06 Perform the various assignments in a professional manner according to industry standards.		
13.0	Demonstrate proficiency in computer skillsThe student will be able to:		
	13.01 Identify all computer parts.		
	13.02 Demonstrate understanding of computer performance specifications.		
	13.03 Compare and contrast difference between business machines and workstations.		
	13.04 Demonstrate best practices of computer safety and ergonomics.		
	13.05 Demonstrate understanding of operating systems.		
	13.06 Perform software installation and setup.		
	13.07 Perform peripheral device installation and setup.		
	13.08 Perform computer upgrades (memory, hard disks and cards).		
	13.09 Perform storage management operations (project/ file).		
	13.10 Demonstrate knowledge of computer maintenance.		
	13.11 Troubleshoot computer hardware and software issues.		

Course Title: Digital Photography 3

Course Number: 8201330

Course Credit: 1

Course Description:

This course covers competencies in photo editing software, photographic lights, sets and photo processing.

Abbreviations:

FS-M/LA = Florida Standards for Math/Language Arts NGSSS-Sci = Next Generation Sunshine State Standards for Science

CTE	Standards and Benchmarks	FS-M/LA	NGSSS-Sci
17.0	Use photo editing softwareThe student will be able to:		
	17.01 Identify the computer requirements for photographic software.		
	17.02 Demonstrate understanding file formats and storage options.		
	17.03 Compare and contrast available photographic software.		
	17.04 Identify parts of the software interface (menus and palettes).		
	17.05 Use each of the basic tool sets.		
	17.06 Import, export and save images.		
	17.07 Develop software and file backup plan.		
	17.08 Demonstrate understanding of layers and channels.		
	17.09 Demonstrate understanding of filters, effects and plug-ins.		
	17.10 Demonstrate understanding of file presets.		
	17.11 Select portions of an image for manipulation.		

CTE S	Standards and Benchmarks	FS-M/LA	NGSSS-Sci
	17.12 Transform selections and images (crop, scale).		
	17.13 Color correct images (brightness, hue and contrast).		
	17.14 Use brushes for image creation and correction.		
	17.15 Identify non-destructive and destructive operations.		
	17.16 Import, edit and export raw files.		
	17.17 Demonstrate the basic use of video.		
	17.18 Implement the undo/redo history and cache system.		
	17.19 Use keyboard shortcuts to improve efficiency.		
	17.20 Locate and effectively use the help menu system.		
18.0	Use photographic lightsThe student will be able to:		
	18.01 Demonstrate understanding of light (direction, intensity, color, contrast, hardness).		
	18.02 Demonstrate understanding of natural, artificial, available and ambient light sources.		
	18.03 Demonstrate understanding and use of sunlight (time of day, color temperature, color correcting, blocking and shade).		
	18.04 Use continuous lighting setups and equipment.		
	18.05 Use flash and strobe light setups and systems.		
	18.06 Use onboard flash systems.		
	18.07 Demonstrate understanding of three-point lighting.		
	18.08 Use a light meter.		
	18.09 Use light modifiers such as scrim, reflectors and flags.		
	18.10 Use lights on location.		
19.0	Use photography sets, backgrounds and stagesThe student will be able to:		
	19.01 Coordinate with creative director on set plan.		
	19.02 Define the intended look and materials to be used.		

CTE S	tandards and Benchmarks	FS-M/LA	NGSSS-Sci
	19.03 Erect background stands and hang background material.		
	19.04 Build hard and soft cyclorama product stages.		
	19.05 Adjust available seating for studio portraits.		
	19.06 Safely secure all grip equipment including reflector stands, c-stand, light stands and sand bags.		
20.0	Process and print photographsThe student will be able to:		
	20.01 Prepare photos for print using photo editing software.		
	20.02 Adjust the crop, bleed and trim of a photo.		
	20.03 Adjust the color mode and resolution of a photo.		
	20.04 Calibrate computer monitor and software for printing system.		
	20.05 Compare and contrast available papers, printers and inks.		
	20.06 Compare and contrast available printing services based on quality, speed, price, reliability, location.		
	20.07 Demonstrate understanding of International Color Consortium (ICC) profiles.		
	20.08 Demonstrate understanding of archival inks and papers.		
	20.09 Work with color and black and white images.		
	20.10 Analyze color prints for correct color and contrast.		
	20.11 Mount, mat and frame photographs.		

Course Title: Digital Photography 4

Course Number: 8201340

Course Credit: 1

Course Description:

This course covers competencies in photo/video journalism and digital single-lens reflex (DSLR) video production.

Abbreviations:

FS-M/LA = Florida Standards for Math/Language Arts NGSSS-Sci = Next Generation Sunshine State Standards for Science

CTE S	standards and Benchmarks	FS-M/LA	NGSSS-Sci
21.0	Demonstrate knowledge of photo/video journalismThe student will be able to:		
	21.01 Demonstrate understanding of the history of photo/video journalism.		
	21.02 Identify the jobs and roles related to photo/video journalism.		
	21.03 Analyze the legal and ethical issues related to photo/video journalism.		
	21.04 Describe the elements that make up a photo story.		
	21.05 Sequence a photo story and write captions.		
	21.06 Imbed metadata as needed.		
	21.07 Shoot correct length of video to tell story and provide coverage.		
	21.08 Prepare media for and identify distribution sources.		
22.0	Demonstrate knowledge of digital single-lens reflex (DSLR) video productionThe student will be able to:		
	22.01 Compare photography and video on DSLR.		
	22.02 Compose shots for movement.		

CTE Standar	ds and Benchmarks	FS-M/LA	NGSSS-Sci
22.03	Choose the appropriate video format (standard/codec and frame rate).		
22.04	Compare and contrast DSLR video with traditional video cameras.		
22.05	Choose appropriate recording media based on card speed and size.		
22.06	Select appropriate video friendly lenses and focusing aids.		
22.07	Select appropriate lighting gear.		
22.08	Set appropriate exposure, white balance and shutter speed.		
22.09	Connect and setup audio interface.		
22.10	Identify video compression picture quality loss.		
22.11	Demonstrate the use of full and cropped sensors such as rolling shutter.		
22.12	Establish the use of action/safe and title safe areas.		
22.13	Set appropriate focus.		
22.14	Use microphones and audio devices.		
22.15	Understand the use of matte boxes.		

Course Title: Digital Photography 5

Course Number: 8201350

Course Credit: 1

Course Description:

This course covers competencies in video software and commercial digital photography business.

Abbreviations:

FS-M/LA = Florida Standards for Math/Language Arts NGSSS-Sci = Next Generation Sunshine State Standards for Science

CTE S	standards and Benchmarks	FS-M/LA	NGSSS-Sci
23.0	Demonstrate knowledge of video softwareThe student will be able to:		
	23.01 Demonstrate understanding file formats and storage options.		
	23.02 Identify parts of the software interface.		
	23.03 Use each of the basic tool sets.		
	23.04 Import file and video to be composited.		
	23.05 Use layers and compositing.		
	23.06 Use filters, effects and plug-ins.		
	23.07 Use motion paths.		
	23.08 Use lighting effects.		
	23.09 Use rendering functions.		
	23.10 Mask video.		
	23.11 Color correct video using brightness, hue and contrast adjustments.		

CTE S	tandards and Benchmarks	FS-M/LA	NGSSS-Sci
	23.12 Use vector and color keying tools.		
	23.13 Demonstrate understanding of time correction.		
	23.14 Export final video to be used with video editing software.		
24.0	Practice the business of commercial digital photographyThe student will be able to:		
	24.01 Identify business aspects of commercial digital photography.		
	24.02 Apply appropriate communication and human relation skills.		
	24.03 Understand the photography industry's various market sectors including events, family portrait, public relations, product/studio, fashion, catalog, magazine and food.	/	
	24.04 Develop a business plan for a commercial photography business.		
	24.05 Identify and understand the importance of industry associations related to commercial photography.		
	24.06 Describe the role of special interest groups.		
	24.07 Research market rates for photographic work.		
	24.08 Compare and contrast available stock photography sites.		

Course Title: Digital Photography 6

Course Number: 8201360

Course Credit: 1

Course Description:

This course covers competencies in format cameras and High Dynamic Range (HDR) photography.

Abbreviations:

FS-M/LA = Florida Standards for Math/Language Arts NGSSS-Sci = Next Generation Sunshine State Standards for Science

CTE S	standards and Benchmarks	FS-M/LA	NGSSS-Sci
25.0	Operate various format camerasThe student will be able to:		
	25.01 Use alternative format cameras.		
	25.02 Use a medium format camera.		
	25.03 Use a point and shoot camera (fixed lens).		
	25.04 Use a mobile phone camera.		
	25.05 Use a digital single-lens reflex (DSLR) camera.		
	25.06 Use a mirror-less camera.		
26.0	Demonstrate knowledge of High Dynamic Range (HDR) PhotographyThe student will be able to:		
	26.01 Explain HDR photography.		
	26.02 Demonstrate HDR workflow and operation.		
	26.03 Select appropriate HDR subject.		
	26.04 Select appropriate camera support equipment (tripod, monopod, grips).		

CTE Standards and Benchmarks		NGSSS-Sci
26.05 Configure camera for HDR photography.		
26.06 Acquire HDR image.		
26.07 Process and create HDR image with photo editing software.		
26.08 Reduce ghosting effect using photo editing software.		

Course Title: Digital Photography 7

Course Number: 8201370

Course Credit: 1

Course Description:

This course consists of developing a professional photography portfolio.

Abbreviations:

FS-M/LA = Florida Standards for Math/Language Arts NGSSS-Sci = Next Generation Sunshine State Standards for Science

CTE S	CTE Standards and Benchmarks		NGSSS-Sci
27.0	Develop a professional portfolio of workThe student will be able to:		
	27.01 Identify elements of a professional portfolio and resume.		
	27.02 Examine and determine student work to include in a portfolio and resume.		
	27.03 Gather cohesive photographs and information to include into portfolio and resume.		
	27.04 Explore the use of internet websites for portfolio distribution.		
	27.05 Determine the format for portfolio and resume.		
	27.06 Research local galleries for portfolio exhibition.		
	27.07 Produce resume for final review.		