COMPETENCY BASED
COURSE OF STUDY
Visual and Performing Arts

For

Photography
Level II

July, 2013

Course Description

Photography II

Photography II continues to provide in-depth training and experiences in photography. Students will expand their knowledge of darkroom techniques, various photo papers, films. filters, alternative processes, and digital photography. They will continue to learn about photographic history and cultural context. Critique will become more sophisticated and students will further explore personal conceptual approaches and ideas.

Photography II
COURSE OF STUDY

TOPICAL OUTLINE

FIRST SEMESTER

UNIT		WEEKS
I	Fundamentals of Photographic Design and Composition Level II	4
II	Digital Photography/Art and Technology-Phase I, Level II	4
III	Related Career Exploration-Phase I, Level II	Infused
IV	Abstract Compositions	8
V	Photography History	Infused
VI	Critique/Self Evaluation	Infused

SECOND SEMESTER

UNIT		WEEK
VII	Portraiture / Lighting Level I I	8
VIII	Photography History	Infused
IX	Digital Photography/Art and Technology-Phase II, Level II	8
X	Related Career Exploration-Phase II, Level, II	Infused
XI	Photography History	Infused
XII	Critique/Self Evaluation	Infused

Photography II
Suggested Timeline Marking Periods I and II

UNIT # I	**(Unit Focus)** ***Fundamentals of Photographic Design and Composition*** ***Level II***
TIMELINE:	**4 weeks/infused**
UNIT GOAL **design** **(students will kn**	**Distinguish the elements of photographic composition and principles of design through practical application, including technical theory and vocabulary.**

VOCABULARY

Composition
Balance
Principles of Design
Rule of Thirds
Camera Angle
Contrast
Framing
Line dominance
Movement
Value
simplicity

UNIT OBJECTIVES

The student will be able to:

1. Demonstrate use of vocabulary in photographic composition.
2. Identify and extrapolate through photographic selection, elements of photographic composition used in the creation of successful photographs.
3. Critique the work of others in a manner that is appropriate, constructive, and critical.
4. Glean technical and aesthetic techniques through the critique of photographs.
5. Interpret and analyze design concepts perceived in art and nature.
6. Compare and contrast natural phenomena through design concepts.

STUDENT EVALUATION & ASSESSMENT:

- Written & oral examinations
- Research projects (written and practical)
- Practical assignments (demonstration of competencies)
- Journal writing/Notebooks

Daily participation evaluation (observed by teacher)

VISUAL AND PERFORMING ARTS CORE CONTENT STANDARDS

1.1.2.D.1 The basic elements of art and principles of design govern art creation and composition.

1.1.5.D.1 Understanding the function and purpose of the elements of art and principles of design assists with forming an appreciation of how art and design enhance functionality and improve quality of living.

1.1.8.D.1 Describe the intellectual and emotional significance conveyed by the application of the elements of art and principles of design in different historical eras and cultures.

INSTRUCTIONAL/ ADJUSTMENTS

Modifications, students with learning difficulties, possible misunderstanding.

- **Cultural Selection related to secular/seasonal demands**
- **Immersion for ESLstudents**
- **IEP adj.as needed per student**

LITERACY CONNECTIONS

Callow.P.(2001).ICT in Art International Journal of Art & Design Ed.,20(1)

REFERENCES HISTORICAL / CULTURAL MATERIALS/RESOURCES:

- Textbook/Exploring Photography,R.Walker&R.Walker 1996 The Goodheart-Wilcox Co.Inc.
- Videos/The Way I See It,Eastman Kodak 1986. / Composition Mastery,Alain Briot, 2010.
- Guest artists/ Alex Anton/John Russo/Bill Horin
- Field Trips/Grounds For Sculpture, Hamilton NJ/ The Statue Of Liberty, Liberty State Park NJ/The Boardwalk in Atlantic City.
- Teacher Demonstration

CAREER APPLICATIONS/ LIFE ADJUSTMENTS

Via You Tube, observe various freelance /professional photographers and discuss the work type/style environment ./ Improve and Evolve your Photographic CompositionDVD, You Tube.

UNIT # II	**(Unit Focus)** **Digital Photography/Art and Technology** **Phase I, Level II**	
TIMELINE:	**4 weeks/infused**	
UNIT GOAL **design** **(students will know)**	**Students will examine and execute techniques of digital image capture while comparing and contrasting technical advances.**	
VOCABULARY **Sensors** **Pixel** **CCD arrays** **CMOS sensors** **Viewfinder** **Resolution** **Image storage device** **Memory card reader** **Scanner** **Digital resolution**	**UNIT OBJECTIVES** **The student will be able to:** 1. Recognize the influences of art on technology and technology on the arts. 2. Compare and contrast photographic imagery that incorporates technical advances with personal photographic intention. 3. Identify art tools, materials, and techniques to solve specific art problems. 4. Interpret criteria used for aesthetic judgment of photographs. 5. Discuss career applications in digital photography within the surrounding community (county, state).	**STUDENT EVALUATION & ASSESSMENT:** • Written & oral examinations • Research projects (written and practical) • Practical assignments (demonstration of competencies) • Journal writing/Notebooks Daily participation evaluation (observed by teacher)
	VISUAL AND PERFORMING ARTS CORE CONTENT STANDARDS 1.1.2.D.1 The basic elements of art and principles of design govern art creation and composition. 1.1.8.D.1 Describe the intellectual and emotional significance conveyed by the application of the elements of art and principles of design in different historical eras and cultures. 1.3.2.D.3 Employ basic verbal and visual art vocabulary to demonstrate knowledge of the materials, tools, and methodologies used to create and to tell visual stories. 1.3 Performance: all students will synthesize those skills, media, methods, and technologies, appropriate to creating, performing, and/or presenting works of art in dance, dance, music, theatre, and visual art. 1.4.12.B.1 Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and the principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, multimedia artwork from diverse cultural contexts and historical eras.	**INSTRUCTIONAL/ ADJUSTMENTS** **Modifications, students with learning difficulties, possible misunderstanding.** • **Cultural Selection related to secular/seasonal demands** • **Immersion for ESLstudents** • **IEP adj.as needed per student**

LITERACY .	REFERENCES HISTORICAL / CULTURAL MATERIALS/RESOURCES: • Textbook/Exploring Photography, R.Walker &R.Walker, copyright 1996. The Goodheart-Willcox Company,Inc. • Making Digital Negatives, Dan Burkholder, copyright 1999 Bladed Iris Press Second Edition. • The Digital Printing Hand,book,by Tim Daly, copyright 2002,Amphoto Books,NYNY. • Videos/ Photography Revealed/Magic of the Image,copyright films for the Humanities and Science,Princeton 1999. DVD/ Great Digital Pictures,Nikon Inc 2007. DVD/Understanding Digital Photography,Nikon School, Nikon Inc 2007. Careers as a Professional Photographer Greg Rozacopyright 2001The Rosen Pub. Group. Inc.,NY,NY. • "Scanner As Fine Art",Kris Fontes, School Arts May/June2008 • Photo And Digital Imaging, Jack Klasey, Goodheart Willcox, inc.,2002 • Teacher Demonstration /digital cameras, / scanners.	CAREER APPLICATIONS/ LIFE ADJUSTMENTS **Via You Tube, observe v Demonstrations showing various special effect techniques /applications used in Photoshop.** **Show DVDs/Understanding Digital Photography.** **DVD/photography Revealed, Nikon Digital Series.** **Guest Artists such as/Bill Horin, H.Hunter, Donna Conner, Alex Anton.(local Professional Photographers).**

Photography II

Suggested Timeline
Marking Periods I and II

UNIT # IV	**(Unit Focus)** **Abstract Compositions**	
TIMELINE:	**8 weeks/infused**	
UNIT GOAL **design** **(students will know)**	Extrapolate knowledge acquired in a variety of contexts to create visual images with increasing independence.	
VOCABULARY **Sensors** **Pixel** **CCD arrays** **CMOS sensors** **Viewfinder** **Resolution** **Image storage device** **Memory card reader** **Scanner** **Digital resolution**	**UNIT OBJECTIVES** **The student will be able to:** 1. Recognize the influences of art on technology and technology on the arts. 2. Compare and contrast photographic imagery that incorporates technical advances with personal photographic intention. 3. Apply design concepts to solve problems of composition with increased independence. 4. Demonstrate a responsible attitude that promotes the safe use of computer software and the photographic classroom. 5. Discuss career applications in digital photography within the surrounding community (county, state).	**STUDENT EVALUATION & ASSESSMENT:** • Written & oral examinations • Research projects (written and practical) • Practical assignments (demonstration of competencies) • Journal writing/Notebooks Daily participation evaluation (observed by teacher)
	VISUAL AND PERFORMING ARTS CORE CONTENT STANDARDS 1.1.2.D.1 The basic elements of art and principles of design govern art creation and composition. 1.1.8.D.1 Describe the intellectual and emotional significance conveyed by the application of the elements of art and principles of design in different historical eras and cultures. 1.3.2.D.3 Employ basic verbal and visual art vocabulary to demonstrate knowledge of the materials, tools, and methodologies used to create and to tell visual stories. 1.3 Performance: all students will synthesize those skills, media, methods, and technologies, appropriate to creating, performing, and/or presenting works of art in dance, dance, music, theatre, and visual art. 1.4.12.B.1 Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and the principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, multimedia artwork from diverse cultural contexts and historical eras.	**INSTRUCTIONAL/ ADJUSTMENTS** **Modifications, students with learning difficulties, possible misunderstanding.** • **Cultural Selection related to secular/seasonal demands** • **Immersion for ESLstudents** • **IEP adj.as needed per student**

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Photography II

Suggested Timeline
Marking Periods I and II

UNIT # V	**(Unit Focus)** **Photography History**	
TIMELINE:	**Infused**	
UNIT GOAL **design** **(Students will know)**	Examine the works of master photographers throughout the history of photography while recognizing the relationship between the choices an artist makes and the society or context in which he/she works.	
VOCABULARY **Sensors** **Pixel** **CCD arrays** **CMOS sensors** **Viewfinder** **Resolution** **Image storage device** **Memory card reader** **Scanner** **Digital resolution**	**UNIT OBJECTIVES** **The student will be able to:** 1. Recognize the influences of art on technology and technology on the arts. 2. List photographic styles and cultures in relationship to the physical world and personal interpretation. 3. Select and visually analyze works of various artists that record, preserve, highlight, and symbolize cultural ideas. 4. Distinguish how specific societies are reflected in and changed by works of art.	**STUDENT EVALUATION & ASSESSMENT:** • Written & oral examinations • Research projects (written and practical) • Practical assignments (demonstration of competencies) • Journal writing/Notebooks Daily participation evaluation (observed by teacher)
	VISUAL AND PERFORMING ARTS CORE CONTENT STANDARDS 1.1.2.D.1 The basic elements of art and principles of design govern art creation and composition. 1.1.8.D.1 Describe the intellectual and emotional significance conveyed by the application of the elements of art and principles of design in different historical eras and cultures. 1.3.2.D.3 Employ basic verbal and visual art vocabulary to demonstrate knowledge of the materials, tools, and methodologies used to create and to tell visual stories. 1.3 Performance: all students will synthesize those skills, media, methods, and Technologies, appropriate to creating, performing, and/or presenting works of art in dance, dance, music, theatre, and visual art. 1.4.12.B.1 Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and the principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, multimedia artwork from diverse cultural contexts and historical eras.	**INSTRUCTIONAL/ ADJUSTMENTS** **Modifications, students with learning difficulties, possible misunderstanding.** • **Cultural Selection related to secular/seasonal demands** • **Immersion for ESLstudents** • **IEP adj.as needed per student**

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Photography II

Suggested Timeline
Marking Periods I and II

UNIT #VII	**(Unit Focus)** **Portraiture/Lighting Level II**	
TIMELINE:	**8 weeks**	
UNIT GOAL **design** **(students will know)**	Students will recognize types of artificial lighting used in photography and apply those techniques in and out of the studio.	
VOCABULARY **Backlighting** **Bounce flash** **Fill in flash** **Frontlighted** **Side light** **Strobe** **Ambient light** **Incandescent light** **Flood light** **Reflectors** **Fill in light** **Hair light** **Incident light**	**UNIT OBJECTIVES** **The student will be able to:** 1. Identify the types of artificial lighting used in photography. 2. Describe the major types of portable flash equipment and how they are used. 3. Apply the basic techniques of studio lighting for both portrait and product photography. 4. Discuss the techniques for controlling light in the studio. 5. Compute proper exposures using guide numbers for various flash and ASA combination. 6. Use a dedicated electronic flash unit.	**STUDENT EVALUATION & ASSESSMENT:** • Written & oral examinations • Research projects (written and practical) • Practical assignments (demonstration of competencies) • Journal writing/Notebooks Daily participation evaluation (observed by teacher)
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Photography I

Suggested Timeline Marking Periods I and II

UNIT # IX	**(Unit Focus)** **Digital Photography** **Phase II Level II**	
TIMELINE:	**8 weeks**	
UNIT GOAL **design** **(students will know)**	Identify techniques of digital image capture and apply those techniques to solve specific art problems with increasing independence.	
a	**UNIT OBJECTIVES** **The student will be able to:** 1. Identify the major types of digital cameras 2. Recognize the influences of art on technology and technology on the arts. 3 Compare and contrast photographic imagery that incorporates technical advances with personal photographic intention. 4. Discuss the variety of tools, and techniques used to solve specific art problems with increasing independence. 5. Discuss career applications in digital photography within the surrounding community (county, state).	**STUDENT EVALUATION & ASSESSMENT:** • Written & oral examinations • Research projects (written and practical) • Practical assignments (demonstration of competencies) • Journal writing/Notebooks Daily participation evaluation (observed by teacher)
	VISUAL AND PERFORMING ARTS CORE CONTENT STANDARDS 1.1.2.D.1 The basic elements of art and principles of design govern art creation and composition. 1.1.8.D.1 Describe the intellectual and emotional significance conveyed by the application of the elements of art and principles of design in different historical eras and cultures. 1.3.2.D.3 Employ basic verbal and visual art vocabulary to demonstrate knowledge of the materials, tools, and methodologies used to create and to tell visual stories. 1.3 Performance: all students will synthesize those skills, media, methods, and technologies, appropriate to creating, performing, and/or presenting works of art in dance, dance, music, theatre, and visual art. 1.4.12.B.1 Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and the principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, multimedia artwork from diverse cultural contexts and historical eras.	**INSTRUCTIONAL/ ADJUSTMENTS** **Modifications, students with learning difficulties, possible misunderstanding.** • **Cultural Selection related to secular/seasonal demands** • **Immersion for ESLstudents** • **IEP adj.as needed per student**

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Photography II

Suggested Timeline
Marking Periods I and II

PHOTOGRAPHY VOCABULARY

Aperture: The lens opening that changes in diameter, thereby determining how much light passes through to expose the film.

Aperture Priority Setting: An exposure setting taken with a camera where the photographer chooses the aperture setting and the camera sets the shutter speed for proper exposure. If the photographer changes the aperture, the camera automatically changes the shutter speed to match.

Aperture Ring: The ring located on the outside of the lens, usually behind the focusing ring. It controls the size of the aperture opening.

Auto Exposure Bracketing: A camera option that automatically sets the exposure of the film to varied shutter speeds and/or aperture settings.

Autofocus (AF) System: A common system on SLR cameras where the camera lens automatically focuses the image using a selected part of the picture.

Automatic Camera: A camera with a built-in exposure meter that automatically does the work of adjusting the aperture, shutter speed, or both for proper exposure.

Automatic Setting or Program Exposure: An exposure setting where the camera sets both the aperture setting and shutter speed for proper exposure.

Bulb Setting: An exposure setting on SLR cameras labeled with a "B." The bulb setting opens the shutter and keeps it open as long as you keep pressing the shutter release. The bulb setting is best used for photographing fireworks and other things that need a long exposure time.

External flash: A supplementary flash unit attached to the camera. External flashes are used for many things including increased flash range and red-eye reduction.

Film: A photographic emulsion of an image that is fixed on a flexible, transparent base.

Filter: A colored or transparent round glass the size of a camera lens which a photographer attaches to the camera by either screwing it onto a lens, holding it in front of the lens, or inserting it in a filter holder. The filter gives different effects to the photographer's images, depending on the type of filter.

Finder or Viewfinder: The area on the camera where the photographer views the subject area that will be recorded on the film.

Fixed-Focus Lens: A non-adjustable camera lens, which is set for a fixed distance.

Flash: A brief, intense burst of light from a bulb or flash unit.

F-Stop or F-Number: A number that indicates the size of the aperture lens opening such as f/1.4, f/4, f/5.6, f/16, and f/22.

The larger the f-stop number, the smaller the lens opening. F-stop determines your depth of field.

Focal Length: The distance, as marked on the lens, between the film and the optical center of the lens when the lens is focused on infinity. The distance is often listed in millimeters, such as 50mm.

Focal-Plane Shutter: The shutter system on cameras with a built-in lens. When the shutter is pressed an opaque curtain containing a slit moves directly across in front of the camera film, exposing the film.

Focus: The act of adjusting the focus setting on a lens in order to sharply define the subject.

Hot Shoe: The area on a camera that holds a small external flash.

Image Stabilization or Vibration Reducing: A lens with an internal system to detect camera shake and compensate for it.

Internal Flash. A flash integrated into the body of the camera, usually on the top.

Lens: Optical glass or a similar material that collects and focuses light to form an image on film.

Lens Hood or Shade: An attachment located at the front of a lens to keep unwanted light from striking the lens and causing image flare.

Light Meter or Exposure Meter: An instrument that measures the light reflected from or falling on an object for proper exposure. Cameras often have an internal light meter but external light meters are more effective.

Macro Lens: A lens which changes the perspective to focus from an extremely close distance to infinity.

Manual Focus: The process of setting the focus using the focus ring on the lens instead of using the camera's

Manual Setting: An exposure setting where the aperture setting and the shutter speed are both set by the photographer. It gives the photographer more freedom in choosing shutter speed and depth of field when composing.

Motor Drive or Continuous Mode: An electronic mechanism that advances the film to the next frame and continues taking photographs. Continuous mode is often used in Sports Photography.

Normal Lens: A lens that does not change the perspective of the image like a telephoto or wide-angle lens.

Reflector: Any device which reflects light onto a subject.

Shutter Blades: A movable cover in a lens that controls the aperture setting and the time when light reaches the film.

Shutter Priority: An exposure setting taken with a camera where the photographer chooses the shutter speed setting and the camera sets the aperture for proper exposure. If the photographer changes the shutter speed, the camera automatically changes the aperture to match.

Single-Lens-Reflex (SLR) Camera: A camera in which you view the scene through the same lens that takes the picture.

Soft Focus Lens: A special lens that creates soft outlines in the image.

Telephoto Lens: A lens which changes the perspective to make the object appear closer.

Time Exposure: An exposure that takes seconds or minutes to complete.

Tripod: A three-legged support that holds the camera steady.

Wide-Angle Lens: A lens which changes the perspective to make the objects appear in a wider field of view.

Zoom: A lens which changes the perspective like a telephoto or wide-angle lens. The zoom, though, has a wide range of focal lengths, allowing the photographer to change the perspective from close in to far away.

Exposure Terms

Bracketing: The process of taking a series of photographs of the same subject through a range of exposures both

lighter and darker, to insure a correct exposure. Some SLR cameras have settings that allow automatic bracketin

Film Speed: Your choice of film speed as reflected in an ISO number.

Highlights: The brightest areas of a subject.

ISO Number: A rating of the film's sensitivity to light. The higher the number, the more sensitive or "faster" the film; the lower the number, the less sensitive or "slower" the film.

Overexposure: The washed-out, overly bright areas of a photograph due to too much light reaching the film.

Shutter Speed: The duration for which the aperture will remain open. On an SLR camera the shutter speed can be adjusted. The numbers represent either seconds or fractions of a second. For example, 1 = 1 second, 15 = 1/15 second, 60 = 1/60 second, etc.

Tone: The degree of lightness or darkness on a print.

Underexposure: The muddy, dark areas of a photograph due to too little light reaching the film.

White Balance: A function on the camera that compensates for different colors of light being emitted by different light sources.

Lighting Terms

Ambient Light: The natural, available light in a scene.

Backlighting: The light coming from behind the subject.

Bounce Lighting: Light that is bounced off a reflector to give the effect of ambient light.

Diffuse Lighting or Soft Lighting: Lighting that is low or moderate in contrast.

Existing Light: Any available light regardless of time of day and at any location.

Fill Flash: A technique to brighten dark shadow areas, often used when the subject is located in the dark shadow.

Fill-In Light: Light added to the existing light by use of a lamp, flash or reflector.

Frontlighting: Light shining from the direction of the camera toward the subject.

Sidelighting: Light shining on the subject from the side relative to the camera, often casting long shadows.

Photography Definitions - Digital Photography

Aberration

Imperfection in an image caused by defects within a lens. These affect color, sharpness and shape, on parts or all of the photograph.

Ambient Light

Also known as existing light. It is the light that is already there before you add any light with your camera's flash. The natural light in a particular scene, such as daylight or lighting from a man-made source such as a lamp or floodlight that is already turned on.

Angle Of View

This photo term is used to describe how much a lens 'sees'. A large angle of view means it's wide angle and your picture will include a lot more subject. A small angle of view means it's zoomed in to a narrower angle or telephoto and not as much is included in the photo.

Aperture

The definition of aperture is the size of the opening inside the lens. It controls how much light strikes the camera's senor sensor. The numbers used are called f-stops. A lower number such as f-2 or f-4 means the aperture is more open or larger.

Changing the aperture will change the range of what is in focus. A large f-stop like f-11 is a small aperture and will give you more depth of field, DOF. A larger DOF is a higher range of near to far things that are in focus.

Aperture Priority

A camera setting where the photographer sets the aperture and the camera will set the shutter speed automatically to give the right exposure.

Artificial Light

As a photography term, it mean any light on your subject that is not the sun or something illuminated by sunlight. This could be your camera's flash, a light bulb or other electrically generated light source.

Aspect Ratio

The proportions or ration of a picture's width to it's height. An 8x10 print has the same aspect ratio as a 16x20 print. The width compared to the height in both sizes are 4:5 ratio.

Artifacts

Picture imperfections from an error when the camera processes the data or from a bad spot on your camera sensor. Sometimes it's only a single tiny pixel that won't be seen. Sometimes there can be hundreds or thousands of bad pixels.

Backing Up Making copies (and saving in a 2nd location) of important computer files such as documents or digital photographs. This protects you if the original files are lost or damaged.

Backlight

Photo term used to describe the situation when most of the light is coming from behind your subject. You are shooting towards the light, so your subject is lit from behind. A silhouette of a person with the bright sun setting behind them is an easy example to imagine.

Ball head

Tripod ball heads are extremely poplar on monopods and tripods. They are easy to loosen to adjust your camera on any of its axises. Here is a comparison between camera ball heads and pan-tilt heads: Tripod Ball Heads

Bokeh

Bokeh means blur, but specifically it's an effect based on getting different shapes in the out of focus areas of a photograph.

Bounce Lighting

A lighting method that involves aiming the main light sources so that it bounces or reflects off of a surface. The light is often bounced off a large white or light object. This could be a wall, ceiling or reflector. The light becomes "softer" and doesn't have harsh shadows light a direct light source.

BPI

BPI is the acronym for **Basic Photography Information.**

Buffer

This is a temporary storage place for the data that your digital camera uses. This allows you to take several photos quickly without having to wait for the photos to be stored in the camera's permanent memory. A large buffer allows you to shoot many photos while the camera is processing and saving photos.

Cable Release

An accessory which allows you to trip your camera's shutter release without touching it. This helps to prevent camera shake and means you can take pictures with long exposures and not get Blurry Pictures.

Camera Monopods

There are differences in the way monopods are made. Some are for videographers. Some are for hikers. What is different about Camera Monopods?

Color Cast

The effect of one color dominating the look of an image. Often caused by incorrect settings of a digital camera's white balance for the lighting.

CCD

Charge Coupled Device. One of the two main types of image sensors used in digital cameras. Digital Camera Choice-CCD vs CMOS

Color Temperature

Color temperature is a characteristic of visible light. In photography it often refers to a **warm color** or a **cool color**

CMOS

Complementary Metal-Oxide Semiconductor. One of the two main types of image sensors used in digital cameras. Digital Camera Choice-CCD vs CMOS

Compact Flash Card

A common type of digital camera memory card. There are two types of CF cards. Type 1 and type 11, that vary in their thickness.

Compression

Reducing the file size of digital data files by removing redundant or non-critical information within a digital image. This makes the size of your digital image file smaller and easier to store.

Contrast

The difference between the darkest and lightest areas in a photograph.

Cropping

Only using part of the picture area by framing a smaller area and cutting out the area outside the frame to improve the composition.

Crop Factor

It is also commonly referred to as a focal length multiplier. It's a number used to compare lens focal length in relationship to the size of a sensor.

Dedicated Flash

Attached or separated electronics flash that sends/receives information with the camera to ensure proper camera and flash settings to get the right exposure.

Depth Of Field (DOF)

The distance between the closest and farthest points that appear in acceptably sharp focus in a photograph. This is one of the most important digital photography terms to understand. It can effect every single picture you will every take. The DOF varies with the lens aperture, focal length and distance to subject.

D-SLR (DSLR)Camera

DSLR - The photography definition is Digital Single Lens Reflex camera. A camera that allows the scene to be viewed through the lens EXACTLY as the photo will be taken.

Diagonal

Anything that is not straight up and down or straight side to side is considered a diagonal. Diagonals are often use in photography compositions to create more visually interesting photographs. If you

Digital Zoom

A zoom-like effect enlarging the central portion of a scene. Not my favorite feature at all. You waste the use of the full size of your sensor. Optical Zoom is a much better feature to have.

DPI - Dots Per Inch

The number of dots of ink per inch when a photo is printed or the number of dots per inch on a tv screen or computer monitor. Often confused with the resolution of a digital camera sensor which is PPI (pixels per inch). Just remember higher DPI means higher quality.

Downloading

Transferring files from a digital camera or other source such as a web site or server to a computer.

Exposure

The total amount of light allowed to fall on a digital camera's sensor during the process of taking a photograph. It is a product of how much time (the-shutter-speed) the shutter is open, how wide of an opening (the-aperture) and how sensitive (the-ISO-setting) the sensor is.

External Flash

An accessory flash unit that is attached as an add-on on top of the camera or completely separate from the camera. It is the opposite of "built-in" flash.

Existing light

The light that is naturally illuminating a scene without any additional light that has been added by the photographer. Ambient light and available light are two other terms that mean the same thing.

Fill Flash

A flash technique used to brighten deep shadow areas even though there may be enough light for a proper exposure according to your camera's built-in exposure meter.

Ideal for portraits. Manually turning on your camera's flash or using a separate, remote or external flash will fill in the darker shadow areas caused when the lighting is coming from behind or from a sharp side angle.

Fill flash is also useful if your background is very bright and you want to match the brightness of your subject.

Flash Memory

The technology used by memory cards. A kind of solid-state memory that is electrically changeable and retains those changes even in the absence of electricity.

Focal Length

What is focal length ? The technical definition: the distance between the near nodal point of the lens and the film plane when the lens is focused on infinity.

FPS

Frames per second or the number of pictures taken within a one second interval. Cameras with high FPS capabilities are great for Sports Photography.

F-stop

is a number related to the size of the lens opening(same as aperture). It's actually the ratio of the lens focal length divided by the diameter of the lens opening of the lens. The larger f-stop number, such as f-11 means a small lens aperture.

Full Frames Sensor

means that the camera's senor is the same size as 35mm film.

GOBO

A light blocking devise that got its name because it **GO**es**B**etween the subject and the light source.

Gallery

There are many definitions of the word gallery, but on this photography definitions page, we are interested in

a photo gallery as a collection or assortment of photographs.

HDR

In photography, what is definition of HDR? A photographic technique used where several shots are taken of the same scene at different exposures.

Highlights from the underexposed photos and shadows from the overexposed photos are combined together to create a new picture.

High Key

An image that is mainly made up of light tones, which relatively few mid-tones or shadows. A picture of a polar bear playing in the snow is a good example of a high key photograph.

Histogram

A graph showing the brightness range of an image. Histograms can be used to make a better judgment if you have a good exposure for your picture.

Full-featured digital cameras and some computer programs can display these graphs. Histograms plot brightness along one axis of the graph and how many pixels at that brightness level along the other axis of the histogram graph.

I

ISO

The ISO refers to how sensitive the digital camera sensor is. A high ISO number means the sensor is more sensitive to light. In other words, it needs less light to get the right exposure. This will allow you to take a picture in a darker situation or you can use a faster shutter speed or a smaller aperture and still get a good photo exposure.

JPG

The standard format of digital photography

KKey light

Also called "main light." The principal source of light on a subject or a scene. The key light is often the brightest light on the subject, or the one that will have the greatest overall effect on the image.

Kicker

A kicker light is a light the "kicks" in a little more light to a small area of the subject such as a hair light or edge light to create a highlight or more separation from the background.

Latitude

The range of dark areas to light areas that can be recorded or perceived. Our human eyes have a much, much larger range of latitude than digital camera sensors.

Light Ratio

A lighting ratio is the ratio between the main light (also known as the key light) and the fill light. Lighting ratios are used primarily in portrait photography. A light ratio of 2:1 means that the main light is twice as bright as the fill light.

For more on this topic click on Light Ratio.

M

Macro Photography

Close up photography of a subject where the image is recorded on the sensor at the same size or larger than actual subject. If you have an interest in macro photography, find out more about it in this related article: Macro Photography.

For information on macro photography equipment and technique, go to Macro Photography Equipmentand Macro Photography Technique.

MB - Megabyte

A megabyte of memory is about 1 million bytes of information. This is the same as 1,000 kilobytes (K) A photograph that is several MB (megabytes) is a higher quality and is suitable for printing. Usually when photos are used for emailing or for web site use, they are smaller and we talk about their size in kilobytes(KB)

Megapixel

This digital camera term means one million (1,000,000) pixels. Camera manufacturers describe the size of a

digital camera's sensor in megapixels and abbreviate the term as "MP".

An 8 MP camera has a sensor that has about 8 million pixels. Caution: sensor size is not the only thing to look at when comparing digital cameras.

Monopod

Sometimes referred to as a unipod, "mono" means one and pod means "leg." A one legged support for your camera.

Monopod Head

Monopod Heads are the attachments on the top of the monopod that make it versatile and adjustable to different angles. Attaching your camera directly to a monopod without a head will add stability but it really limits your use.

Ball heads are by far the most popular heads used with the pistol-grip version of ball heads being the most versatile **and** fastest to adjust.

Noise

This photography term has to do with the grainy look you find in a digital image. It is more apparent in underexposed images or in the shadows where the pixels on the digital camera sensor did not get enough exposure.

Nature Photography

Second to portrait photography, my favorite kind of photography. One of those activities that combines two interests into one. Night

Open Shade

The definition of open shade is shade that is in the shadows of large buildings, under big trees or other area that still allows a large light source to illuminate your subject. Benefits of open shade: No harsh highlights from the sun, no squinting, and an even light source.

Optical Zoom

The different photography definitions of optical zoom vs. digital zoom are important to understand. With optical zoom, you are using the lens to come closer or to include more in your pictures. So, you still are using all of your camera's sensor to record your image. This gives you the best quality. Digital zoom means you are literally not using part of your sensor to make it **appear** as if you are moving closer to your subject. You can always do cropping later when you are doing your photo editing.

Over Exposure

When a picture is overexposed, the sensor received too much light during exposure. Sometimes a little over exposure is okay. If the overexposure is too great, details in the highlight areas of the photograph are lost forever. Many professional photographers like to shoot in "raw" mode, because the exposure can be adjusted, even after the photo has been taken.

Over exposure often happens when most of a subject is dark, but there are very bright areas in your scene as well. This is the biggest photo mistake when photographing the moon:

Panning

Technique that involves taking a picture while moving the camera at a relatively slow shutter speed. It is almost always used when tracking a moving object. When properly carried out, the object is rendered relatively sharply while its surroundings are blurred. Here

Pixel

What is a pixel? "Pixel" is a contraction of the two words: picture element. On an LCD screen, what appears as a single white dot actually consists of three pixels: one red, one green and one blue. White light is actually a blending of the three colors together.

With most camera sensors, there are actually two, very tiny green light collectors combined with a tiny red and a tiny blue light collector. The camera processes the information gathered from these combined collectors and each pixel has a value for red, green and blue which make up it's actual color.

Portrait

A pictorial representation of a person, usually showing the face. Prime Lens

A prime lens is simply a lens with only one focal length. In other words, it has no zoom feature.

Raw

Also called camera raw or raw format. Shooting in "raw" mode allows the photographer to process the data later instead of having the camera process the data at the time the picture is taken. It contains the most information possible from a camera's sensor. Saving the raw image allows us to process it any way we wish, making choices on color, sharpness, exposure and many other variable. Raw files are very large compared to the standard jpg format that all digital camera can shoot in.

RGB

The three colors which cover the range of wavelengths that we humans and digital camera sensors are sensitive to: Red, Green and Blue.

Rule of Thirds in Photography

This is one of the photography definitions that is searched for frequently and great to know and use. The photography rule of thirds is a way to improve your composition by dividing you photo in thirds with imaginary lines, both vertically and horizontally.

Saturation

The degree of hue in color as perceived subjectively. Saturated color can be termed strong, vivid, intense or deep. Desaturated color can be termed weak, pale, washed out or dull.

Shallow Depth of Field

This is one of those photography definitions that has several ways to express it. "Shallow" or "Narrow" or "Short" depth of field all mean that the range of things in focus is small.

Shutter Lag

Using a digital camera, the delay that occurs between pressing the shutter release button and the actual moment the picture is taken.

Shutter Speed

Simply the length of time that the camera allows the light to strike the sensor. It is usually given in fractions of a second such as 1/60 of a second or in seconds for very long exposures.

Shutter Priority

An exposure mode (in a camera with automatic exposure control) that permits the photographer to preset

shutter speed while the camera automatically determines the aperture setting required for proper exposure.

Thumbnail

A small version of a photo. Image browsers commonly display thumbnails of photos several or even dozens at a time.

Tripod

A three-legged stand for supporting a camera or other apparatus. There is a huge range of sizes, quality, prices and uses for tripods. Tripods are more stable and heavier than one-legged supports calledMonopods. Another very important component with tripods that many photographers neglect to consider is what is the Best Tripod Head to use.

TTL

In photography terms TTL stands for "Through The Lens."

It is most commonly applies to electronic flash and exposure. TTL flash means the exposure is controlled by reading the actual amount of light reaching the camera sensor and adjusting the length of time the flash fires. Exposure with flash was originally only manually controlled; then "automatic" flash control was done with a separate sensor on the flash unit. Now it has evolved to E-TTL and E-TTL II by Canon and I-TTL by Nikon.

Tutorial

A tutorial is one method of transferring knowledge. More visual and specific than a book or a lecture; a tutorial seeks to teach by example. A self-paced learning exercise; a lesson prepared so that a student can learn at their own speed, at their convenience.

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Underexposure

When the sensor does not receive enough light, the image is underexposed. It can be lightened, but image quality is reduced. Digital Noise and un-sharpness result.

USB

Universal Serial Bus: A standard type of connecting port for transferring information (data, photos) between devices such as computers, digital cameras, printers and scanners. A USB device can be used as soon as it is connected, without having to reboot the computer.

Vignetting

What is Vignetting? It is the gradual darkening of your picture toward the edges. Sometimes photographers create this effect on purpose. Darkening the edges will emphasize the area in the middle of your picture. Vignetting can also be caused by a defect in the lens or a lens hood or something else blocking part of the lens when the photo is taken.

W

White Balance

The camera adjusts the overall scene's color balance so that the areas meant to be reproduced as neutral or white in the picture will be accurate, thereby also adjusting all the other colors in the scene using the same color shift values.

X- Photography Definitions - digital photography terminology

X SETTING

- Shutter speed setting at which flash synchronization occurs. For some manual cameras, the X setting designates the maximum shutter speed at which the camera synchronizes with flash.

X-SYNC - Same as "X Setting"

Zoom

The action of varying the focal length of a zoom lens to show more or less in the photo. You can zoom in to show less in the photo or zoom out to show more in the photo. Zooming in will bring the main subject closer. See the photography definitions for optical zoom and digital zoom. It's important to know the difference

between these two digital camera terms.

Art Rubric - an Artwork Assessment Form by Marvin Bartel

Category	Your name _____ Artist's name _____ Description	Check & comment here		
		Good	Average	Needs work
Growth New Learning & Improving	How does this work compare to previous work by same person?	.	.	.
	Does it show more feeling and expressiveness?	.	.	.
	Does it show more thought?	.	.	.
	Does it show more skill?	.	.	.
Creativity & Unexpected Discoveries	How original, innovative, and daring is the work?	.	.	.
	Does it extend or change from past work done by same student?	.	.	.
Fulfills Assignment	How well does the work solve the problems outlined in this assignment?	.	.	.
	Are the variations from the assignment made for a valid reason?	.	.	.
Care	Is the making of the work appropriate for the style of art being made?	.	.	.
	Didn't rush to get it done, but paid attention to consistency in the work.	.	.	.
Helpful	Was the student cooperative & generous in discussions & in helping others without doing it for them?	.	.	.
	Were good questions asked?	.	.	.
Work Habits	Did the student stay on the job?	.	.	.
	Were conversations with classmates about the artwork, not other topics?	.	.	.
Composition And Design	Experimenting with principles of design and composition used to make the visual elements work well?	.	.	.
	Experiments to achieve unity and variation to achieve evocative work?	.	.	.

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Artwork Critique Form

QUESTIONS	Write your ideas here. Give first impressions. Make guesses. Say what you see, do **not** say what you like, or don't like. **Do not judge.** Describe, analyze, and interpret.
1. What stands out the most when you first see it?	.
2. Explain the reason you notice the thing you mention in number 1.	.
3. As you keep looking, what else seems important?	.
4. Why does the thing you mention in number 3 seem important.	.
5. How has contrast been used. See Contrast Note - over.	.
6. What leads your eye around from place to place? See Connections - over.	.
7. What tells you about the style used by this artist? See Style -over	.
8. What seems to be hiding in this composition?	.
9. Why do you think this was partially hidden?	.
10. Imagine the feelings and meanings this artwork represents?	.
11. What titles could you give this artwork?	.
12. What other things interest you about this artwork?	.
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Send comments & questions. CONTACT - the author

Teacher Instruction Page Link
page 1 ---- click here or turn to page 2 for notes

Photography I
Related Career Exploration/ Infused

Phase I, Level I / Phase II, Level I

Explore areas of specialization for professional photographers;
Architectural
Commercial
Editorial
Fashion
Fine Art
Medical/Scientific
Movie Stills
Nature/Environmental
Photojournalism
Sports
Underwater/Marine
Wedding/Portrait

Photography II
Related Career Exploration Infused

Phase I, Level II /Phase II, Level II

Digital Photography Careers/The Digital Photography & Internet Revolution
websites
e-products

Freelance
photojournalist
travel
portrait
studio
sports

Schools for Photography
Online College for Photography Options

Photography I
Related Career Exploration/ Infused

Phase I, Level I / Phase II, Level I

Explore areas of specialization for professional photographers;
Architectural
Commercial
Editorial
Fashion
Fine Art
Medical/Scientific
Movie Stills
Nature/Environmental
Photojournalism
Sports
Underwater/Marine
Wedding/Portrait

Photography II
Related Career Exploration Infused

Phase I, Level II /Phase II, Level II

Digital Photography Careers/The Digital Photography & Internet Revolution
websites
e-products

Freelance
photojournalist
travel
portrait
studio
sports

Schools for Photography
Online College for Photography Options

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