

Behind The Lens

Jeff Kusner | www.koozzz.com

photography basics | exposure | composition

fun stuff | challenge yourself

some of my favorites

knox county art league

q and a

Exposure & Composition

Exposure: All About Light

Composition: The placement or arrangement of the **visual elements** in a work of art.

Factors affecting exposure:

Some Factors affecting composition:

Shutter Speed: _____?

Focal point, placement, framing, angle of view, lighting, exposure, lines, patterns, shapes, movement, backgrounds, horizontal / vertical, timing, changing conditions

Aperture: _____?

ISO: _____?

Exposure

Shutter Speed – the time that the film/sensor is exposed to the light

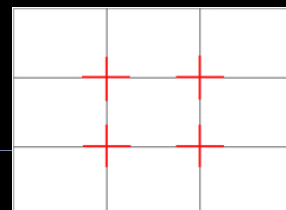
Aperture – amount of light the shutter allows into the camera

ISO – the sensitivity of the film/sensor to light



Shutter Speed, Aperture and ISO all work together

Composition



Composition

Rule of Thirds

The basic principle behind the rule of thirds is to imagine breaking an image down into thirds (both horizontally and vertically) so that you have 9 parts



When Using Rule of Thirds Ask Yourself

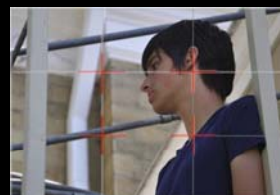
What are the points of interest?

Where will you place them?

Composition

Rule of Thirds: How To Use It?

Place points of interest at the intersections or along the lines so that your photo becomes more balanced



Enables viewers to interact with it more naturally.

Composition

Prominence

Place Your
Focal Point
In A Prominent
Position



Focal point can be anything, building, animal, flower, person...

Composition

Prominence

Place Your
Focal Point
In A Prominent
Position



Focal point can be anything, building, animal, flower, person...

Zoom For A Different Perspective



Composition

Use Depth Of Field
To Blur Foreground/Background

focus on the main subject
to blur those aspects in front of
or behind your main focal point.



How do you adjust
Depth Of Field?

Composition

Use
Depth Of Field
To Blur The
Foreground /
Background



How do you adjust
Depth Of Field?

Aperture / Depth Of Field



f-stop aperture
5.6 wide

13 mid

36 narrow

A wide aperture results in an image that is sharp around what the lens is focusing on and more blurred in the foreground and background. - f 5.6

A narrow aperture results in an image that is more sharp in focus. - f 36

Aperture / Depth Of Field

Aperture refers to how wide or narrow the shutter opens. by controlling the lens' diaphragm, which controls the amount of light traveling through the lens to the film/sensor.



Aperture is indicated by the f-number where each f-number represents a "stop" of light such

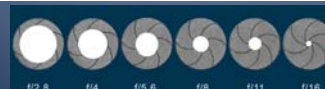
It's confusing, why does the larger shutter opening have a smaller number?

Aperture / Depth Of Field

When you think of aperture consider how the pupil and iris of your eye work.

When you are in bright sunlight your iris adjusts wider so that your pupil decreases in size to prevent too much light from entering. - $f8.3$

When it's dark your iris becomes more narrow allowing your pupil to open wide to allow more light in. - $f2.2$



Composition

Use Aperture To Blur The Background



$f/6.3$ | $1/100$ sec | 500mm

Throw the foreground and background out of focus using Depth Of Field

Composition

Give your subject space to look to

Try not to shoot "head on"



when viewing a photo people's eyes will automatically go in the direction of the subjects eyes.

Composition

For a Different Perspective

Shoot From Above & Below



With older kids take multiple shots, often the 2nd or 3rd shot is better than the first.

Composition

When Photographing Children

Get down to their level

Take plenty of shots

What Composition Factors?



Photo used by permission of Heidi van Hoof

Composition

Pan To Blur



iso 200 | 1/200 sec | f/7.1 | 105mm

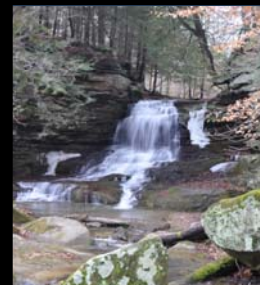
Shutter Speed

- Indicates the speed in which the shutter opens then closes
- Measured in fractions of a second
- Shutter speed value also represents a "stop" of light.

1/60th sec



1/6th sec



Shutter Speed

Fast
Shutter
Speed
Stops
Action



iso 250 | 1/2000 sec | f/5.6 | 200mm

Shutter Speed

Fast
Shutter
Speed
Stops
Action



iso 250 | 1/2000 sec | f/5.6 | 200mm

Shutter Speed

Low light
conditions may
require extended
length shutter
speeds



117 seconds | Iso 100 | f/4 | 50mm | Nikon D600
Photo used by permission of Marcus McCay

Shutter Speed

Balance
shutter speed,
aperture
and iso
for different
conditions



15 seconds | Iso 100 | f/5.6 | 20mm | Nikon D600
Photo used by permission of Marcus McCay

ISO / ASA

ISO ratings determine the film or image sensor's sensitivity to light.

Each value of the rating (100, 200, 400, 800... 3200, 6400) represents a "stop" of light

Low ISO rating = less sensitive sensor resulting in a smoother image (less digital noise)

High ISO rating = more sensitive sensor (sensor works more to gather light) Results in a "grainier" image with more digital noise



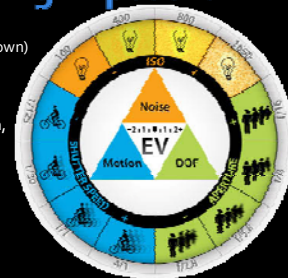
ISO = International Standards Organization
Photo From: www.exposureguide.com

Summarizing Exposure

ISO: image sensor's sensitivity to light, each incremental ISO number (up or down) represents a doubling or halving of the sensor's sensitivity to light.

Aperture: controls the lens' diaphragm, which controls the amount of light traveling through the lens to the sensor/film. Indicated by f-number

Shutter Speed: speed in which the curtain opens then closes. Measured in fractions of a second.



Key is to balance all 3 elements for the desired result

Photo from www.exposureguide.com

Manual / Auto / Speed / Aperture Priority Camera Modes

Family
Shots
Are
Good

But...



Candid Shots

Candid
Shots
Are
Priceless!



Always be on the lookout for candid shots

Candid Shots

Give your subject
space to look to

Try not to shoot
"head on"



Candid Shots

Give your subject
space to look to



Try to focus on the eyes

Framing



Look For Frames



Framing

Look For
Natures
Frames



Foreground, middle ground, background is one compositional technique that can enhance your photographs

Framing

Look For
Other
Frames



Framing

Look For
Other
Frames



RAW vs JPG

Think of a JPG as your print and RAW as the digital negative

If the image data is stored as a JPG file, the image data is first interpolated and processed by the in-camera settings for white balance, saturation, sharpness, contrast etc.

JPG Advantage: smaller file size, read by many programs, sent directly to printer
JPG Disadvantage: loss of quality due to compression.

RAW Advantage: image data available for post processing on computer; adjustments can be made for exposure, white balance, saturation, sharpness, contrast, highlights, shadows, etc.

RAW Disadvantage: large file size, post processing required.

Processing RAW image data provides ability to make adjustments.


RAW vs JPG

Post processing RAW files allows for adjustments to white balance, saturation, sharpness, contrast etc.




RAW vs JPG

I would have been able to recover more of this image had I shot it in RAW



HDR


High
Dynamic
Range
Imaging



HDR compensates for this loss of detail by taking multiple pictures at different exposure levels and intelligently stitching them together to produce a picture that is representative in both dark and bright areas.

HDR


High
Dynamic
Range
Imaging



HDR compensates for this loss of detail by taking multiple pictures at different exposure levels and intelligently stitching them together to produce a picture that is representative in both dark and bright areas.

HDR

High
Dynamic
Range
Imaging



HDR is also commonly used to refer to display of images derived from HDR imaging in a way that exaggerates contrast for artistic effect.



Challenge Yourself - Manual



f/11
13 sec
iso 200
18mm

Challenge Yourself
To Educate Yourself

Challenge Yourself - Manual



f/3.5
1/60 sec
iso 800
18mm

Challenge Yourself - Manual



f/13
30 sec
iso 200
24mm



f/5 1/8 sec iso 3200 52 mm

f/5 1/3 sec iso 3200 48 mm



Challenge Yourself - Manual



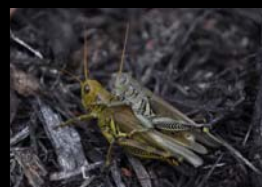
f/5.6
1/40 sec
iso 2500
85mm

Challenge Yourself
To Educate Yourself
What Composition Factors?

Challenge Yourself - Macro



Get
up
close
and
Personal



Challenge Yourself - Macro



Get up close and personal

Look In Places You Don't Normally Look
For A Different Perspective

Challenge Yourself – Macro

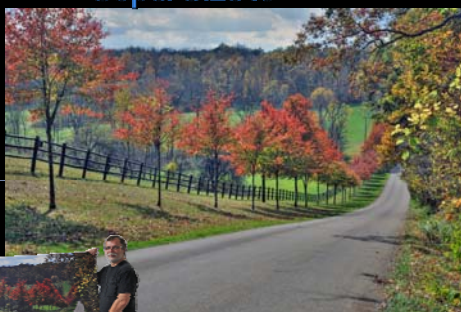
Use an Extension Tube to move in and focus super close



Super Size It

Resolution -
d.p.i.
are key

you can test
the limits of
upsizing via
software for
high quality
photos .



f/11 1/160 sec iso 400 35 mm

30" x 60"

Post Processing Challenge Montage

Have some fun
And learn at the same time



Post Processing Challenge - Montage



WACO
50th Anniversary
Fly-In



Post Processing Challenge- Montage



Challenge Yourself - Montage



How many shots?

Challenge Yourself - Montage



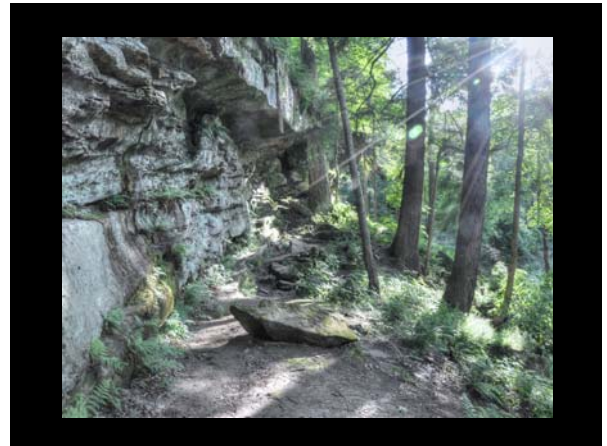
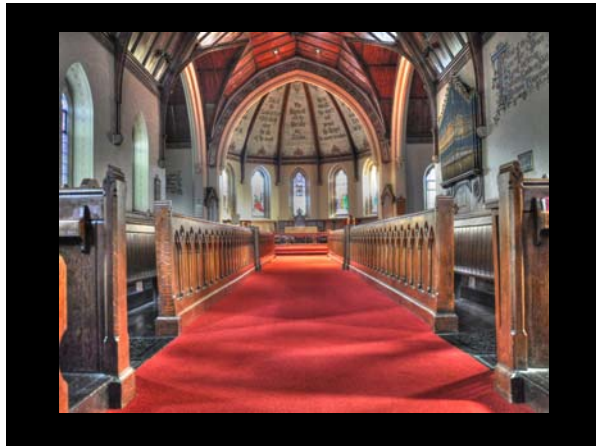
12 Shots | 22 Layers

Challenge Yourself - Montage

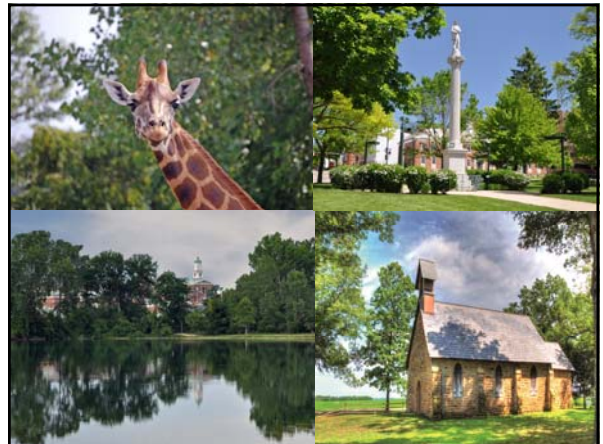


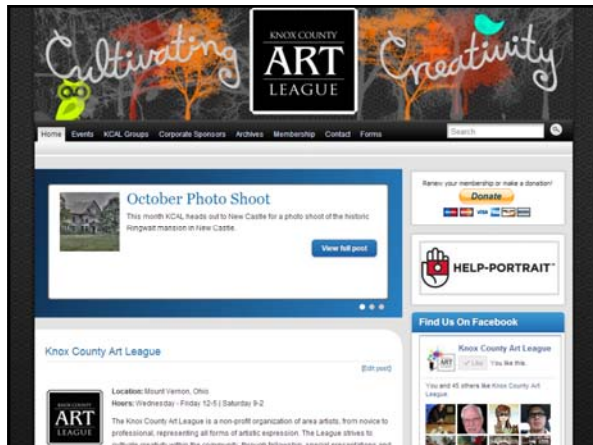
Challenge Yourself - Montage













KCAL Lighting Workshop



KCAL Schnorrmeier Gardens



Ringwalt Mansion, New Castle

