

# BesPhoto Workshop Syllabus

## I. Arrival

### A. Introductions

### B. Methodology

1. Few Topics then assignment

### C. Equipment

1. Camera
2. Batteries
3. Film cards
4. Tripod
5. Cable release
6. Water

### D. Tripods

1. Always use a tripod and cable release
  - a) It takes too long
    - (1) *but you cannot get the image many times without it in darker settings like Starved Rock trails and canyons.*
    - (2) *You may get a better image with it even is bright day light as the camera will not move during exposure.*
    - (3) *You can bracket your exposures and sandwich multiple exposures for the best image in Photoshop*
  - b) Even when shooting birds, use the tripod to rest the camera and steady the camera.
2. Aluminum – light but not as rigid
3. Steel – heavy but rigid
4. Carbon fiber – light and rigid and absorbs vibration
5. Any tripod is better than none
6. Lend out spare tripods

### E. Assignments

1. Use this syllabus to track each shot and what you intended. Then later at home you'll know what you tried and see the result on your computer or prints.

### F. Assignment

1. Set up your tripod and shoot in landscape and portrait positions

## II. Composition I

A. *law of thirds – place the primary subject in the cross sections of the thirds grid.*

B. *filling the frame – When creating an image with one primary subject, zoom in to fill the frame – Human zoom or lens zoom.*

C. *moving subject should be moving into the frame*

### D. Assignment

1. Use law of thirds
2. Fill the frame
3. Moving subject

## III. Camera I

A. *Cable release – always use one*

1. Built-in cable release is camera's self timer

B. *Focus, 1/3 in front – 2/3 behind rule*

C. *Aperture – Controls the amount of light striking the film or digital sensor*

1. f-stop is a fraction of an opening
2. A smaller f-stop number is a larger opening and allows more light to enter, i.e. f2.8
3. A larger f-stop is a smaller opening and allows less light to enter, i.e. f8 ... f16
4. Depth of field
  - a) The amount of the scene that is in focus, front to back
  - b) A smaller f-stop i.e. f2.8 gives less depth of field
  - c) A larger f-stop i.e. f16 gives more depth of field

## ***BesPhoto Workshop Syllabus***

5. Aperture f-stop – The f-stops are f1.0, f1.4, f2.8, f4, f5.6, f8, f11, f16, f22, f32, f45...
6. As you move up one f-stop i.e. f2.8 to f4, you allow half the light in, and increase the depth of field.
7. As you move down one f-stop i.e. f5.6 to f4, you allow double the light in and decrease the depth of field.

### ***D. Aperture priority program mode***

1. You set the aperture, the camera sets the shutter speed
2. Use A mode most of the time
  - a) No need for S or Tv mode for landscape photography
    - (1) *If you want fastest speed, set the aperture to the largest opening*
    - (2) *If you want blur, set the aperture to the smallest opening*
    - (3) *Sometimes cameras fail to get the correct exposure when set in S or Tv mode*

### ***E. Assignment***

1. Use self time on all assignments – I expect to hear many beeps all day or turn the beeps off
2. Set aperture priority mode
3. Use minimum f-stop i.e. f2.8... on close subject to show the far away background is blurred for isolation.
4. Use maximum f-stop i.e. f8 or f22... on close subject to show the far away background is mostly in focus

## **IV. Composition II**

### ***A. depth-of-field – i.e. flower in focus, leaves not***

1. isolation using small f-stop
2. everything is focus using large f-stop

### ***B. flash fill***

1. fill flash - squinting – On sunny days have the person look away from the sun so they don't squint from the brightness. Use fill flash to lighten the face if the subject is close enough.
2. If you are shooting into the shady side on a sunny day, use fill flash to balance the shady side to the sunny background.
3. The above is dependent on how powerful your flash is. You may have to get close and zoom out.

### ***C. Over/Under exposure – You tell the camera to change the exposure by some fraction of an f-stop.***

1. When you do this the camera chooses whether it changes the aperture f-stop or the shutter speed based on the mode the camera is in.

### ***D. Assignment***

1. Use minimum f-stop i.e. f2.8... on close subject to show the far away background is blurred for isolation.
2. Use maximum f-stop i.e. f8 or f22... on close subject to show the far away background is mostly in focus
3. Fill flash
4. Stop sky blow out by under exposing
5. Shoot a silhouette

## **V. Camera II**

### ***A. Shutter – Controls the length of time the light is allowed to strike the film/sensor***

1. Shutter speed – As you double the shutter speed i.e. from 1/60 to 1/125 you allow half the light in. As you half the shutter speed i.e. from 1/60 to 1/30 you allow double the light in.

### ***B. moving subject***

### ***C. moving camera - panning***

### ***D. Lens – It transfers light from the scene to the film/sensor***

1. Focal length – Controls the angle of view expressed in mm

## ***BesPhoto Workshop Syllabus***

2. a small focal length gives you a wider view i.e. wide angle – more depth of field i.e. 28mm
3. a larger focal length gives a smaller view i.e. telephoto – less depth of field i.e. 200mm

### ***E. Assignment***

1. Use speed priority
2. Show motion of someone walking across your image, background is sharp
3. Stop motion of someone walking across your image background is sharp
4. Stop motion of someone walking across your image background is blurred – panning exercise
5. From same location
  - a) Show widest angle of view
  - b) Show telephoto angle of view
6. Move forward and zoom less or not at all and get same shot as above telephoto angle of view
  - a) Notice more background

### **VI. Composition III**

#### ***A. Including Foreground***

#### ***B. Frame the shot***

#### ***C. positive and negative space – balancing the image –***

1. negative space – you are drawing the viewers eye away from the primary subject. Don't clutter the image
2. positive space – what you want the viewer to look at – make the subject the primary object in the image

#### ***D. patterns – i.e. ripples in a lake, bark of a tree, rows of corn***

#### ***E. Assignment***

1. Include foreground in shot
2. Use framing
3. Show negative space – cluttered image
4. Show positive space
5. Show patterns

### **VII. Camera III**

#### ***A. ISO***

1. 25, 64, 100, 200, 400, 1600...
2. low ISO – when light level is bright and/or subject is still – fine grain
3. high ISO – when light level is low and/or subject is moving – coarser grain
4. White balance – digital only (the white balance of film has been pre-determined at manufacturing). Most of the time, that is 99.9% of the time, the cameras AUTO white balance is very effective. However...
5. Quality/image size – digital only – Most digital cameras have the ability to capture images smaller than the mega-pixel rating. Never do this. Always capture the largest image possible. This does use up the memory card faster.
6. Compression – digital only – Use the least compression that you can based on the shooting criteria. Usually, less compression takes longer to save to the digital media i.e. compact flash card in the camera.

#### ***B. Film***

1. B&W - digital – normally color only – a few camera's have BW mode which is very good
2. Color
3. Infra-red
4. Negative
5. Slide
6. Tungsten

#### ***C. Assignment***

## ***BesPhoto Workshop Syllabus***

1. Set camera to lowest iso, auto white balance, highest quality, least compression
2. Take same shot
  - a) At lowest iso
  - b) At highest iso – should show some grain
  - c) Compare

### **VIII. Composition IV**

- A. color – bright red leaf against grass**
- B. perspective**
- C. Shapes**
  1. Angles
  2. Triangle
- D. Scale – include something in shot to give the sense of scale**
- E. Assignment**
  1. Color based shot
  2. Angles
  3. Scale

### **IX. Camera IV**

- A. Metering**
  1. Reflective – what the camera uses – The camera evaluates the amount of light reflected from the subject and read by the sensor
  2. Incident – what light meters use – Measures the amount of light actually falling onto the subject ie if incident of moon is desired, you have to go to the moon.
  3. Matrix – a form of reflective metering – uses samples from multiple areas of subject to match against predetermined results to give good readings in difficult situations ie backlighting.
  4. 18% gray – all reflective meters expose to 18% gray scene
  5. completely black scene will expose as grey
  6. completely white scene will expose as grey
- B. bracketing**
  1. why - assure you are getting accurate exposure, since you are not able to get this image easily/ever again.
  2. What is it – you expose at the meter reading, then again underexposed, then again overexposed
- C. Assignment**
  1. Shoot
    - a) Black
    - b) White
    - c) Combined
  2. Bracketing

### **X. Sunset and Dusk**