BEGINNING PHOTOGRAPHY

LouCrandallPhoto.com
Phone: 801-358-5311
Email: loucrandallphoto@gmail.com

Maintaining your camera and lenses

1. Blow off dust (canned air)
2. Don't touch lens glass with fingers, t-shirts and such (lens cloth)
3. Don't touch mirrors with fingers, etc. (lens cloth)
4. Never oil camera
5. Wear you NECK STRAP!
6. Don't drop you camera or you will buy a new one or very expensive to fix
7. Camera bag
8. Filter protection 1A, UV, etc.
9. Last but not least (replace your batteries)

Four basic parts of a camera

1. Dark chamber — body
2. Opening — lens
3. Control time or length of light exposure — shutter
4. Film plate that holds film flat

Two types of cameras

1. Range finder — point and shoot

   Good points

   a. Simple and usually smaller
   b. Light weight
   c. Less expensive
   d. Takes a reasonably good picture

   Bad points

   a. Small lens = less light
   b. Plastic parts and could break easily
   c. Parallax = two different planes from view finder and lens
   d. Sometimes chops off your picture

2. SLR (Single Lens Reflex)

   a. What you see is basically what you get
   b. Larger than a range finder camera
   c. More options like removable lenses and accessory shoe to add a larger flash
   d. Larger lens means more light and better photo
   e. Most now days have auto and manual = more choices

OTHER TYPES OF CAMERAS

1. Twin Lens Reflex
2. Medium format =120 mm size film and various sizes like 6x4.5 6x6 6x7 6x9

3. Large format == Bellows type and uses inches of film size 4x5 inches 8x10 inches 20x24 and so on.

FILM
1. Print Film (silver base)
2. Negatives and Positives
3. Examples (Fuji, Kodak, Ilford, C-41 (print film), B/W

FILM SPEEDS (ASA and ISO) and Digital CCD or CMOS chip sensitivity
ASA -- American Standards Association
ISO -- International Standards Organization (Same thing)

1. 25, 50, 100, 200, 400, 800, 1600, 3200 etc.
    a. Below 100 (soft, less grain, very slow, needs lots of light)
    b. 100 speed (outdoors sunny, bright, beach, skiing, bright flash)
    c. 200 speed (most common) (sunny, flash, a little indoor, a little outdoors)
    d. 400 speed (medium sensitivity, dummy proof, blow up and find more grainy)
    e. 800 speed and over (low light film, very sensitive to light, concerts w/no flash, indoor basketball games, etc.) (Less light to expose film)
2. DX code
    a. Newer cameras know the type of film you put in because of DX code
    b. Older cameras have to set on ISO or ASA

TYPES OF FILM

1. APS = Advanced Photo System (Kodak Advantix)
    a. 24mm
    b. Negative film that stays in cartridge after developing
    c. Easy to load and reload and more convenient
    d. More expensive and costs more to develop
2. 35mm (very common)
    a. Negative b/w, color b/w c-41 process
    b. Positive (slide film) good for enlargements
3. 120mm – Medium format
4. Large Format films
5. Polaroid films

FILMLESS
1. Digital on electronic media
2. Secure Data

3. Compact flash
4. Memory stick
5. And other size and types of media storage

Photographer Dorothea Lange Quote
"I realize more and more what it takes to be a really good photographer. You go in over your head, not just up to your neck. "

LENSES
1. Glass
2. Aperture ring
3. Focal ring (on older type lenses)
4. Quality usually counts for cost (the more you spend, the better quality)
5. Off brand (such as Sigma, Tamron, Quantaray, and others)

TYPES OF LENSES
Focal length is measured distance from the optical center of the lens to the film plane or Digital Chip

1. Fixed focal length (only one setting)
2. Zoom Lenses (you can change from one focal length to another)

a. Wide angle lenses 35mm and less (short lenses)
   I. Tends to distort close-up objects
   II. Good for small rooms or areas
   III. Landscapes and whole views
   IV. Distorts proportion

b. Fisheye (extreme wide-angle)
   I. Very rounded
   II. Expensive

c. Normal lenses 50mm (normal lenses)
   I. The view from your own eye - typical
   II. Proportions are maintained

d. Telephoto 70mm and up (long lenses)
   I. Compresses Dept.
   II. Brings subjects up close
   III. Lets you be farther away from subject and still get a close-up photo

e. Macro Lenses (extreme close-up)
   I. Sometimes part of a telephoto lens
   II. Gets you up very close to subject
   III. Can distort subject
   IV. Close-up filters (magnifies the subject)

f. Filters
   I. Skylight – Protects your lens
   II. UV (ultra violet)
   II.Polorizers – controls glare
   III.Red, Orange, Yellow, Green – for black and white photography (helps with contrast change on colors)

IV.Blue 80A (helps change yellow back to white, for color)
V. Diffusion – softens the subject
VI. Spot (center is cut-out for the subject to be in focus and around the subject will be softened
VII. Fog – for soft

3. ZOOM LENSES
a. Variable focal length lenses
b. Usually 28mm - 70mm or 70mm — 300mm and so on
c. Any lens that you can adjust the focal length is a zoom lens
d. Range in price and usually expensive depending on construction, zoom, size around, brand, etc.
4. 2X extenders – doubles the focal length, but takes out some light
5. Speed of a lens
a. How quickly the lens gathers light
b. Lots of glass
c. Larger in size
d. Lower F-stop# the faster the lens such as 2.8 (f/4.5 not as fast)

FOCUSING
1. Manual cameras (you do it)
2. Automatic cameras (it will do it or you can do it) AF or MF
3. Who do you focus on (subject closest to me or what I want in focus?)

THREE THINGS THAT EFFECT LIGHT which = Exposure
ISO = film speed (sensitivity)
1. Aperture = lens opening
2. Shutter speed = time or fractions of light hitting the film or chip (1 second, ½ , ¼, 1/8,1/15, 1/30, 1/60 and so on)

CORRECT EXPOSURE
1. Intensity of light
2. Aperture x shutter speed

APURATURE
1. Lens opening
2. F-stop (Large # is small and small # is large)
3. Depth of field
4. Large opening of lens or aperture means shallow depth-of-field and small opening of lens or aperture means large depth-of-field

SHUTTER SPEED
1. Controls subject movement
2. Controls camera shake
a. Waterfall (slow s.s.)
b. Runner (fast s.s.)
c. Wildlife (medium s.s.)
d. Kids (fast s.s.)

Time or Bulb settings (you control the shutter by holding down the shutter release and then letting it back up

TRI-PODS AND MONOPODS

1. Anything under 1/60th of a second
2. Helps camera shake, etc.

CAMERA MODES

1. Auto (pretty smart, but sometimes called dummy mode)
   Green face, green camera, green square (the same as above)
   NO CHOICES
2. Program (photo) aka dummy mode
3. A - (aperture priority) or AV for Aperture Value
   ONE CHOICE…you control the aperture and the camera controls the shutter
4. S - (shutter priority) or TV for Time Value
   ONE CHOICE…you control the shutter and the camera controls the aperture
4. M-(manual) ALL THE CHOICES
   Gives up all the control and responsibility, but meter helps us.
   Meter gives an average of 18% gray. It is basically color blind.

METERING

1. Averaging mode
2. Scans the entire view and averages where you point
3. Spot metering
4. Center weighted
5. Matrix
6. WE WANT OUR METER AS CLOSE TO THE CENTER OR MIDDLE AS POSSIBLE AND THEN GO FROM THERE!
7. Meter is blind to colors especially dark colors or shades (only sees gray)
8. Over expose lighter things such as: wedding dresses, dark skinned people, in the shade, etc.
9. White reflects a lot and black reflects very little

WHAT IS MOST IMPORTANT IN MY SHOT

1. Aperture (F-stop)
2. Then shutter speed
3. Always consult your meter and make appropriate changes to get desired photo. (if you are in manual mode)
4. Under exposed is bad, leaves a haze sometimes on film. Under exposed is better for digital because it gives up pixels to lighten.
5. Bracketing (up 1, middle, down 1 f-stop)
   Bracketing is shooting the same subject in many ways and many settings, over and over to get many choices.

LIGHT

1. Sky light is best (usually mornings)
2. Our eyes adjust, but meter does not.
3. If you don't like the light or something behind you, move.
4. Diffused through filtered screen or a filter
5. Light can be bounced, shaded or reflected

6. Direct lighting (bright side and dark side) (noon sun)
7. You are smarter than your camera (if you've learned to shoot in just about every condition and every kind of light, then you should control your camera and not let your camera control you.) If you can't figure it out, consult the light meter, try custom modes, etc.

COLOR BALANCE

1. Daylight (white)
2. Tungsten (yellow)
3. Incandescent (yellowish orange)
4. Florescent (greenish) ugly

FLASH (artificial light)

1. Use your flash to fill up shadows, in the sunlight
2. Smaller flashes (usually built-in) will only shoot about 10-15 feet. Larger flashes can be bounced off ceilings, walls and will shoot much further than 15 feet.

REDEYE

1. Retina is blood filled (this is why the eyes look red)
2. Red Eye reduction (double flash or strobe)
3. Flash too close to lens
4. Bounce flash or move it off camera or away from lens
5. Get subjects eyes away from direct flash

COMPOSITION

1. Good composition simply means a pleasing selection and arrangement of subject within the picture area.
2. Simplicity
    a. What am I trying to say or the purpose or focus?
    b. Distraction not good, simplifies the picture, get closer or move.
    c. Background not having things that are distracting like trees coming out of heads, etc.
    d. GET CLOSER = simplify

GOLDEN MEAN

1. Rule of thirds
2. Space for subject to move into the picture

LINES

1. Sometimes less is more
2. Diagonal lines are more dynamic
3. Horizontal lines are more calming (less eye movement)
4. S curve moves the eye
5. Straight lines are not as comfortable
6. Geometric lines moves our eyes around and back again
7. HORIZONAL LINES SHOULD BE STRAIGHT and not right in the middle of the picture.

BALANCE

1. Asymmetrical (balanced but not perfect) (more pleasing)
2. Symmetrical (perfect, in the middle, could cut in half) (less pleasing)

FRAMING

1. Foreground or background
2. Draws attention to the subject
3. Go through frame to get to the subject
4. Helps move image or eye
5. Gives depth

MERGERS (avoid)

1. Trees or poles sticking out of heads
2. WATCH WHAT'S IN THE BACKGROUND

CROPPING

1. Crop to make a better photo

TIMES OF DAY TO SHOOT (Natural Light)

1. Morning light (skylight) -- Crisp
   Blues, pinks
2. Noon – harsh (not a good time to shoot)
   Whites, too bright and shadows
   (Look for shade!)
3. Afternoon (later in the day)
   Soft
   Yellows, reds, orange
4. After light
   Right after the sun goes down
   Vivid light, purples, yellows, reds, etc.!

Just remember to get up early and get to your subject before the sun comes up…there is more opportunity as the sun comes up and as the sun goes down!

DIGITAL

Digital cameras should not be intimidating; they are so smart and advanced. We are literally holding a computer (scanner). They are much like film and if you use the same techniques, as you used with film cameras, you should get desired results.

FILE FORMATS

JPEG (Joint Photographic Experts Group)

a. This format is most typical. It's considered to be a LOSSY type file which means that you loose some information every time you save and reopen.
   Advantages of JPEG are the file is compressed so the size of the file is smaller to send across the internet or store your photos. Your file size depends on how many Picture Elements or Pixels your camera shoots when it records the image. Disadvantage is there is not as much information because of the compression and every time you save and reopen, you can loose some of the detail. (Note: this would take many, many times of saving and reopening.)

TIFF (Tagged Image File Format)

a. This an ideal format for photographs, after adjusting your photos in software programs, such as Adobe Photoshop. You will not loose the information, such as JPEG, and it's better for printing purposes.
b. Remember it takes a lot more memory to store a TIFF file and usually not good for sending across the Internet.

RAW

a. RAW data is just that, it's RAW. All the data and color information is used. Most software programs will not open a RAW file and it takes much more memory to store and use RAW files. It does offer the ultimate in total data and the photographer has complete control of the files.

WHITE BALANCE

a. White Balance gives the photographer more control over lighting. Our eyes adjust for poor lighting, but our cameras don't. Film was the worst culprit to bad color lighting.
b. Your digital camera has many controls for white balance, such as: using a flash, tungsten lights, incandescent lights, yellowish light bulbs, shade, etc.
c. Your camera will probably give you the best result on AWB or Auto White Balance, in most situations.

There are many books available for photography. You may want to study film and then digital or compare their similarities before studying digital. You will be surprised to know that your nicer film cameras had a lot more control and quality, than you thought.

Read articles, from photo magazines, to learn more about digital as well. Digital has really turned the photography world upside down and has made photography so much easier. Education is best learned (especially when it comes to digital) by just shooting more and more. Learning from mistakes and successes and then shooting some more!

Lou Crandall Quotes:

"YOUR REACTION TO A PHOTO IS YOURS AND WILL BE DIFFERENT TO EVERYONE WHO LOOKS AT IT. TRY TO MAKE YOUR PHOTOGRAPHS PLEASING TO YOU FIRST, THEN THINK ABOUT OTHERS AND WHAT THEY WILL THINK OR FEEL WHEN THEY SEE YOUR PHOTO!"

"PLACE YOURSELF AT THE BEST TIMES OF SHOOTING AND IN THE PLACE OF MOST POTENTIAL. THIS WILL GIVE YOU A BETTER CHANCE TO GET A GOOD SHOT AND REMEMBER TO BE PATIENT."

"GET CLOSER"

"CROP, CROP, AND CROP SOMEMORE"

"PROBABLY THE BIGGEST MISTAKE PHOTOGRAPHERS MAKE IS THEY DON'T GET CLOSE ENOUGH TO THEIR SUBJECT."

"THE DIFFERENCE BETWEEN A PROFESSIONAL AND AN AMATUER PHOTOGRAPHER IS THE SIZE OF THE TRASHCAN."

"THE MORE PHOTOS ONE SHOOTS, THE LUCKIER THEY GET."

"PROFESSIONALS DON'T ALWAYS SHOOT IN MANUAL MODE, THAT WOULD BE LIKE BUYING A NEW CADILLAC AND TAKING OUT THE POWER STEERING." A PROFESSIONAL SHOOTS IN ALL TYPES OF MODES AND THE DIFFERENCE IS THAT THEY UNDERSTAND WHAT ALL THE MODES ARE DOING. ANOTHER THING IS THAT PROFESSIONALS SHOOT IN MANUAL MODE WHEN THE LIGHT IS NOT RIGHT AND THEN THEY CONTROL THEIR CAMERA MANUALLY."

"A PHOTOGRAPHER IS IN MANY WAYS, LIKE A DOCTOR, THEY BOTH PRACTICE, THE DIFFERENCE IS THE DOCTOR HAS MUCH MORE AT RISK."