

Digital Imaging and Photography Final Study Guide 2019

How will your performance change when setting your digital camera to a higher ISO?

Explain aperture settings. Which will have more depth of field: a setting of f16 or f4?

What is focal length?

Explain what a camera does for you when you use typical camera modes such as scenic, sports, portraits, and action?

One stop larger (f5.6 to f4 for example) lets in how much more light?

How does doubling the shutter speed, say from 1/100 to 1/200 second affects the amount of light?

Explain exposure bracketing.

What techniques can you use on your digital camera to improve its ability for "selective focus" that is, limit the camera's depth of field?

What is a Continuous or Burst Mode Camera Setting?

What exactly does Curves do?

What is an adjustment layer useful for ?

What is the difference between normal, overlay, and luminosity layer blending modes?

What is a layer mask useful for?

What does dodging do?

What does burning do?

Explain the differences between short lighting, broad lighting, and butterfly lighting. How might each type flatter a particular subject? What are those eight (at least) posing tips again?

What is a Color Channel?

What is a Hard Light?

What kind of light increases contrast and enhances texture?

What is white balance?

What is the ideal color temperature?

What is the color temperature of overcast skies? Of daytime outdoor shadowed areas?

How do we judge/check white balance in an image?

How do we usually set aperture in macro photography, larger or smaller?

What is a good focal length for macro photography, wide or telephoto?

What typically happens to your depth-of-focus as you move closer to the subject?

What are five advantages of shooting RAW files?

What is luminosity?

Explain what is represented by a histogram.

A: Quantity of pixels per tonal range divided into 256 steps from black to white. Represents tonal or luminosity properties of an image.

What is "clipping" in a tonal range, and why do we care?

What is "framing" in picture composition?

How do you make the best use of morning, mid-day, and evening light, and of foggy or overcast light?

What does noise look like in an image? What causes it?

What are two good situations to use a Polarizer filter?

What are the basic guidelines for placing horizons in your scenic pictures?

Study Questions:

What are seven recommendations for taking panorama "stitch" images?

- A:
- Use a tripod to keep the horizons level and aligned.
 - Have a 15-30% overlap.
 - Try to rotate your camera around a point on the lens axis.
 - Use the same exposure for all the images to be stitched.
 - Watch out for moving objects across images.
 - Remember you can go vertical too.
 - Remember to use for other subjects besides scenic ones.

What are five rules for taking effective HDR shots?

- A:
- Probably use a tripod.
 - RAW is best.
 - Use aperture priority so the DOF does not change between shots.
 - Don't shoot something that is moving.
 - Shoot at -1, 0, and +1.

What are five recommendations for shooting at night?

- A:
- Stabilize your camera. Tripod?
 - Use higher ISO settings. Noise?
 - Autofocus may not work.
 - It is hard to see the frame. Hard to compose.
 - Use a smaller aperture for adequate DOF.

What do the following filters do?

- Polarizer filter
- UV filter
- Graduated Neutral Density filter

Which selection tool allows you to select an area by painting over it in red? A: Quick Mask at bottom of tool palette.

What does HDR Merging do?

A: It combines images and uses data from each with Tone mapping. It combines properly exposed highlight and shadow areas, and produces subtly rich midtones.

Where do you find HDR in Photoshop?

A: File > Automate > Merge to HDR

Why do you want to do Tone and Detail in the HDR editor, rather than back in Photoshop?

A: With a 16-bit image, you have a bigger range of changes you can make.

Study Questions about Editing

What blending mode did we use to change the hair color?

A: Overlay worked best. Normal is ok.

What was the secret to creating a glamorous glow?

A: We used Overlay to blend in a Gaussian blurred version of the image.

Which channel shows the most skin blemishes, Red Green or Blue?

What is "content-aware" fill?

What are the secrets to using the liquefy tool effectively?

Study Questions about Macro Photography

What typically happens to your depth-of-focus as you move the camera closer to the subject?

How much of the available depth-of-field is usually behind the object in focus, and how much is in front?

Why do we make sure the back of the camera is parallel to the surface plain on the macro subject?

What does aluminum foil, a cooler, and a water spray bottle have to do with close-up photography?