

DESN 350 Digital Imaging & Photography Week 1: #2 Assignments
In Long, Read: **Ch 7 Program Mode**
Ch 14 Editing Workflow and First Steps
Ch 15 Correcting Tone
also Pages 311-312 have action shot tips.

1. Short Written Assignment

Make up a shortcut sheet for *your* camera, that you can carry with the camera. It should fit on *one page*, or *½ page* if the font is not too large!

The purpose is to help you remember how to use your camera effectively, and to be quick and useful. So please use your own words, and not simply cut and paste from your manual. You are encouraged to include any instructions you wish to remember, but the following information is important:

Include camera *model* information,

- how to force the *flash on/off*,
 - how to set the exposure compensation +/-,
 - how to set *white balance*,
 - how to shoot *aperture-* and *shutter-priority*,
 - how to use *spot focus*, *spot or center weighted exposure*,
 - what the automatic exposure *modes* do, at least 4 that seem most useful to you!
 - how to activate the *self-timer* control,
 - how can you see a histogram of the image?
 - how to make your camera take **RAW** or **TIFF** images.
-

Camera Work: Action. Submit your best examples of the following assigned images. *All photos should be well-focused and have good tonal range* (histogram should look balanced with very few pure black/white pixels). Consider *cropping* when appropriate. Please add short explanatory *captions* to the seven images. No flash please.

2a and 2b. Two general subject stop-action shots.

3. A stop-action image of objects flying or falling through the air, like a several sheets of paper or splashing water. As much as possible, the whole image, including background should be in focus without blurring. This will take a fast shutter speed.

4a and 4b. Two action images utilizing *panning*. The subject must be moving but captured with "minimum blur", as the camera is panned to capture the subject in motion. The *background*, however,

shows the blur caused by the camera movement. This might take a shutter speed 1/15 sec +/- Please use a different subject for each image.

5a and 5b. Camera Work: Exposure.

Submit two images that you took, including one appropriate for *increased exposure*, and one appropriate for *decreased exposure* (Using the *exposure compensation +/-* control on your camera.). This means one image is high-key and one low-key, and the exposure is adjusted to keep the subject *realistically* dark or light. Watch out for clipping on the high-key example!

6. Exposure and depth of field as a design elements.

Create a collage of five images of a small still-life representing three different aperture settings and three different exposures. Use small objects that have *form* as the dominant characteristic, like cups or fruit. Create a still life arrangement that has almost as much depth as width. The visible effects of the aperture settings will be easier to capture with the camera fairly *close to the objects*.

The exposure range of the images should be +/- 1 to 1.5 stops. The aperture range should represent your camera's widest and narrowest apertures, plus one near the middle of that range.

Keep the camera in the same position for all of the images, so that any differences in the images are not the result of camera distance.

Avoid clipping. A *little* clipping is ok on one or two images, but avoid large areas of obvious highlight clipping.

Include short captions specifying the aperture and exposure settings you used.



Photoshop Work: Cropping (Book Tutorials)

7. Open the image *crop_me.jpg* (birds on wires) and follow the tutorial pp.369-373. Watermark and turn in the resulting image.

8. Open the image *straighten_me.jpg* (chairs) and follow the tutorial pp.374-375. Watermark and turn in the resulting image.

9. Open the *graphwall.tiff* and correct the barrel and pincushion distortion as shown in the

tutorial pp. 375-377. Watermark and turn in a JPEG image.

Photoshop Work: Correcting Tone (Book Tutorials)

10. Open the image *real_world_levels.jpg* (desert rock) and follow the Levels tutorial pp. 392-396. Watermark and turn in the resulting image.

11. Open the image *fence.jpg* and correct the tone using the curves tool. pp. 409-411. Watermark and turn in a JPEG image.

12 a b c. You are given three images (not from the book) that need tonal correction and possibly cropping. Fix them as needed. Watermark, and turn in the resulting images.

Study Questions

Ch 7 Program Mode 128 - 166

Why would your camera have a hard time focusing if the scene is low-contrast?

How does a focus-assist lamp operate?

Why should you notice which focus points are lit up in your viewfinder/LCD?

What is spot focus mode?

Why would you ever aim the camera directly at a subject, press the shutter button ½ way down, hold it while swinging the camera to one side, and then pressing the rest of the way?

How does “servo tracking” work?

When would you want to switch to manual focus mode?

What could you do if the focus had to be good, but you couldn't quite tell from the LCD or viewfinder whether it was good enough? *Use a small aperture!*

What do you focus on in a portrait? *The eyes!*

What is the “golden rule of focus”?

What is white balance?

What color is incandescent (tungsten or halogen) light? Fluorescent light?

What color temperature is ideal light?

What color temperature is cloudy light?

How can you set custom (manual) white balance?

How can you avoid white balance issues altogether when shooting?

Can you correct a bad white balance, like using the incandescent setting under fluorescent lights?

What is drive or burst mode?

If a camera has both a 10-second and 2-second self-timer option, what is the 2-second one designed for?

What is “program-shift”?

Why wouldn't you just set your ISO to a high value and leave it there?

How do you protect your highlights?

Ch 14 Editing Workflow and First Steps

What is the best *order* for doing edits?

1. *Cropping, correcting lens perspective distortion*
2. *Dust/spot removal*
3. *Tonal (brightness/contrast) adjustment*
4. *Color correction*
5. *(optional) Change to grayscale image*
6. *Retouching, glamorizing*
7. *(optional) Compositing – merging images*
8. *Noise reduction*
9. *Sharpening*
10. *Optimizing for print or other media*

What is an image *histogram*?

Why do we crop images?

Ch 15 Correcting Tone

What is image *tone* or *luminosity*?

Explain the *Levels* tool.

Explain the *Curves* tool.

What does a *straight diagonal line* indicate in the Curves tool dialog?