

## Coffee & Camera Session 4 Exercise

### Exercise - Adjusting ISO (optional)

1. Camera Settings:
  - Mode = Aperture Priority
  - Aperture = f/5.6
  - **Shutter Speed is set automatically in Aperture Priority mode**
  - ISO = 100
  - Turn off your Auto ISO control (usually found in your camera's menus, but not all cameras have this control).
2. Find a subject in open shade (see notes below).
  - You can also do this exercise in a room lit by late afternoon window light only
3. Make an image with the current settings.
4. Increase the ISO by doubling the number until you reach the maximum ISO for your camera. Take the same photo at each stop.
  - Remember to **ONLY** change the ISO. Leave all other settings the same.
  - Example: 100, 200, 400, 800, 1600, 3200, etc.
  - Note how the shutter speed is changing to maintain a good exposure. Each exposure should look pretty close to the same as long as the available light is not changing dramatically.
5. Analyze the first image and the last image
  - Zoom in on the photos (on your computer) until you can see the graininess in the high ISO image. Once you get there, take a screen capture.
  - Make sure you zoom in on the low ISO photo the same way to see if you detect any graininess.
    - ✓ On Mac, the screen capture is accessed by Shift-Command-4.
    - ✓ On Windows, the screen capture is called the Snipping Tool.
6. By Sunday, February 11, please send me the screen captures of the zoomed in photos.

**Extra Credit:** Experiment with ISO by taking a photo in relative darkness. See the effect of increasing the ISO when there isn't much light to work with.

### Notes:

1. It's not necessary that you do this project in "open shade," but it's a good concept to learn about and it will always improve your photography (especially family photography).
  - a. See the picture below and note that this is not my drawing (but I like it).
2. Open shade is:
  - a. In front of a house or building when the sun is behind the building. Note that the sun just has to be "behind enough" to create a good shadow.
  - b. In front of a stand of trees when the sun is behind the trees.
  - c. In front of any object that casts a shadow with the sun behind it.
3. Your subject should be looking out from the shade into sunlight beyond the shade.
4. Using open shade is a great way to take photos in mid-day and avoid the harsh contrast of the sun.

