Digital Cameras IV: DSLRs  (My camera: _________________)
Megapixels: ________  Video? __________

Definition: DSLR – Digital Single-Lens Reflex Camera (comparable to a film-35mm camera, yet digital)

A digital single-lens reflex camera (also called a digital SLR or DSLR) is a digital camera combining the optics and the mechanisms of a single-lens reflex camera with a digital imaging sensor, as opposed to photographic film. The reflex design scheme is the primary difference between a DSLR and other digital cameras.

Continuing from Wikipedia...
In the reflex design, light travels through the lens, then to a mirror that alternates to send the image to either the viewfinder or the image sensor. The alternative would be to have a viewfinder with its own lens, hence the term "single lens" for this design. By using only one lens, the viewfinder of a DSLR presents an image that will not perceptibly differ from what is captured by the camera’s sensor.

DSLRs largely replaced film-based SLRs during the 2000s, and despite the rising popularity of mirrorless system cameras in the early 2010s, DSLRs remained the most common type of interchangeable lens camera in use as of 2014.

A good website from which to learn the basics: http://digital-photography-school.com/megapost-learning-how-to-use-your-first-dslr/

What are the basics?

1. A DSLR is different from a point-and-shoot digital camera because, although the DSLR has an automatic mode, most purchasers are looking for a more creative and more controlled way to capture images through more sophisticated settings and options. The option to shoot in “Camera Raw” as well as JPG is also included with a typical DSLR.

2. SHOOTING MODES – Learn and understand the four basic shooting modes (in addition to Automatic) which include:
   a. Aperture Priority (good one to start with)
   b. Shutter Priority (good one to start with)
   c. Manual
   d. Program

3. ISO – In the digital world, ISO refers to sensor light sensitivity. The higher the ISO number, the MORE sensitive the sensor is to light. The less natural light you have, the HIGHER the ISO
number could be to compensate, but the trade-off is that your image will have more NOISE or graininess.

4. **Understand the “EXPOSURE TRIANGLE,”** and how **Aperture, Shutter Speed,** and **ISO** all work together to create your desired image.

**Exercise 1:** Watch this video to better understand the modes mentioned here. https://www.youtube.com/watch?v=mkhQK_8pu9U (2013) (9+min.) from DSLRBluePrint (Subscription Name). Digital DSLR camera explanation of Shutter, Aperture, and ISO settings. Nice comparison between Nikon and Canon mode dials. Many demos involve Canon DSLRs including T4i EOS Rebel.

5. **WHITE BALANCE** – WB button may be found on many DSLRs. Adjusting white balance settings is commonly used when shooting in JPG format in choices such as “Daylight, Cloudy, Beach, Fireworks,” etc. Metering methods may be used to control the way the camera sees light, which is often different from how humans see light. (see the section on Metering in the site listed above and repeated here: http://digital-photography-school.com/megapost-learning-how-to-use-your-first-dslr/)

**Exercise 2:** Watch the White Balance video on the DSLRBluePrint website for more details: http://www.simpleslr.com/alm-psam-wb/ (6+min.)

**Some Advantages of using Digital SLR cameras (DSLRs):**

1) Greater flexibility in editing images on a computer if taken in RAW format.
2) Greater flexibility for printing or for using images “digitally”
3) Greater control over the camera settings.
4) Greater creativity options through various settings
5) Options to buy or obtain filters and lenses that would otherwise be unavailable for a simpler point-and-shoot camera.

Visit some of these websites for more tips and education:

https://photographylife.com/photography-tips-for-beginners (a website that gives some great advice on photography for beginners with DSLRs.)

https://www.youtube.com/watch?v=RsoV4odOPgo (2011 Presenter: Bob Krist) (B and H) (47+ min.) Nikon Digital SLR cameras used in this video. Under subscription name of George Kaplan


https://www.youtube.com/watch?v=J2uVUVyPy0w&list=PLE67992FC392ED625&index=15 (CreativeLive) (47+min.) (2013) with John Greengo. 7 Steps to Great Photography


16 vs 8 bit color depth in Photoshop editing (a reading with visuals site) http://www.photoshopessentials.com/essentials/16-bit/