

# Use of the Canon Rebel Xsi

*for Spring 2009 Astr130 Astro-Photography Students*

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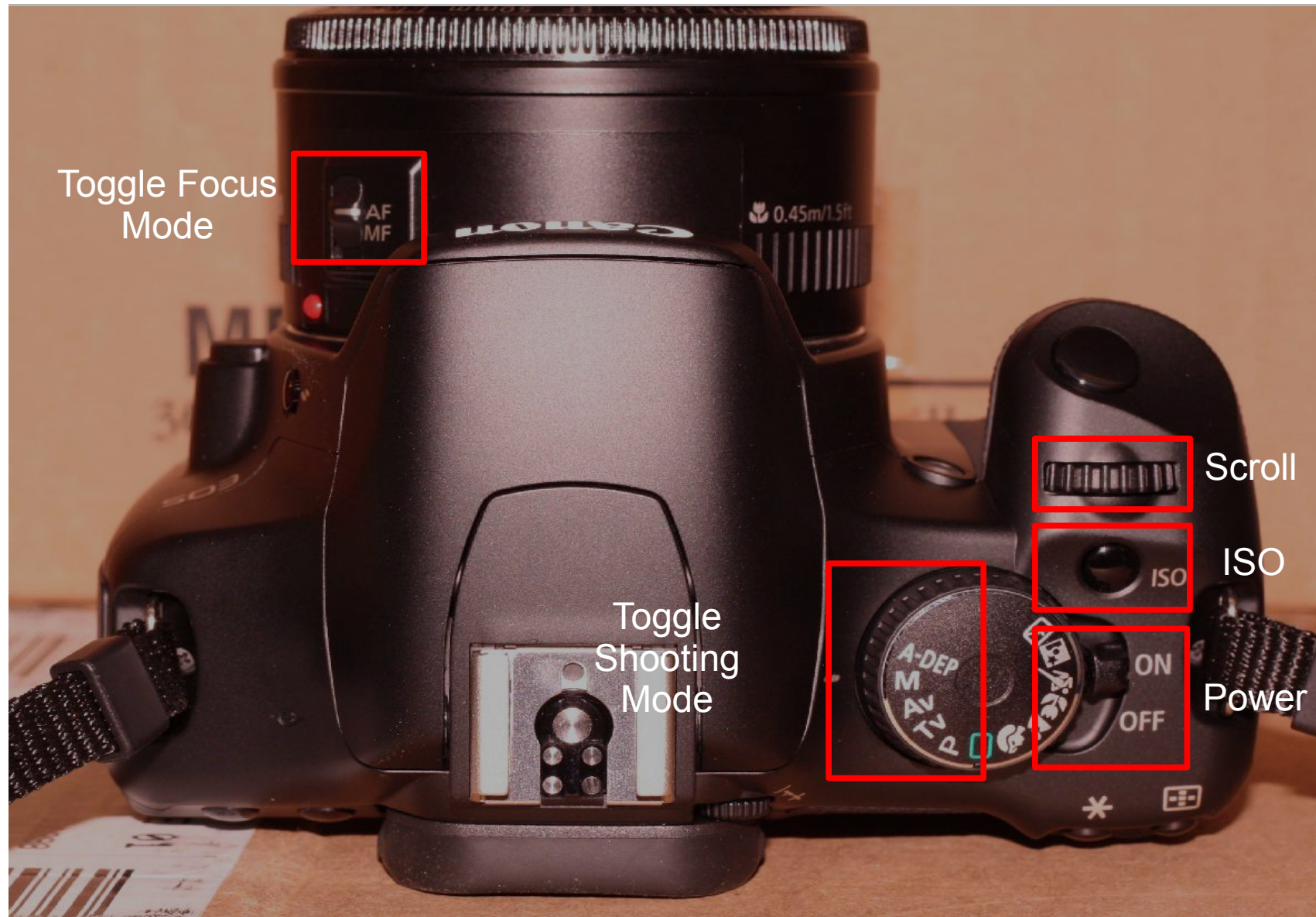
# Objective

- Visually illustrate how to change settings for use in the Astro-Photography lab as a review from the Astro-Photography Orientation Session.

# Terms to Know

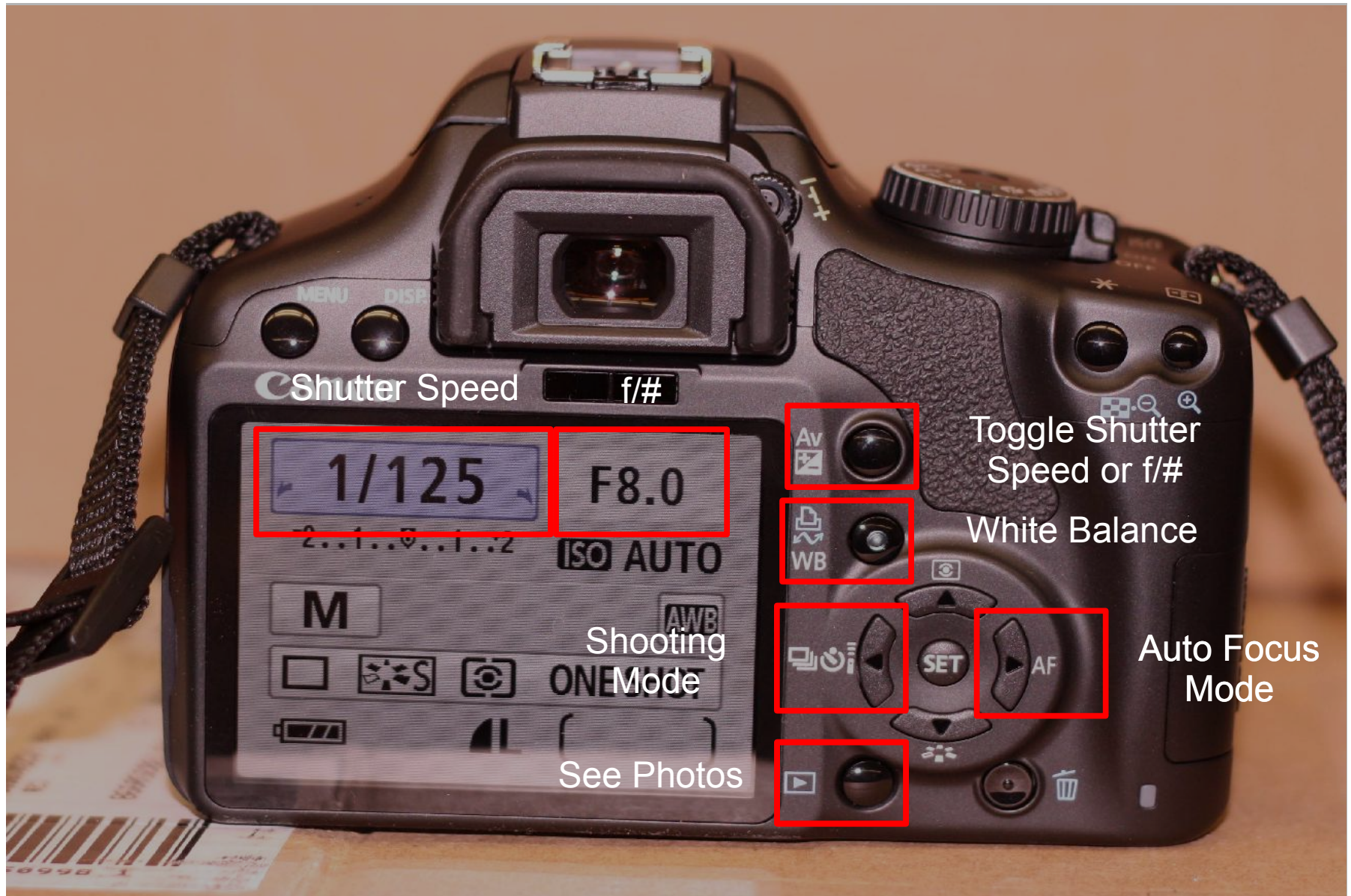
- ISO = Light Sensitivity
- Aperture = Opening Diameter of Camera
  - f/stops: Ratio of the focal length to the lens diameter.
    - Focal length is fixed, alter the diameter of the lens.
    - F/2.8: Wide Aperture; F/22: Narrow Aperture.
- Exposure Time = Shutter Speed
  - Length of time the shutter is open
  - Displayed in seconds
- White Balance
  - How colors are displayed which is dependent on lighting.

# The Top View of the Camera





# Side View of the Camera



# Set Manual Shooting Mode



- Change the Shooting Mode of the Camera to have full control over settings.
  - 1: Turn the shooting mode nob to M for Manual Mode.
  - 2: Your settings will be displayed here in the general menu.





# Set Manual Focus



- Change the Focus Mode of the lens.
  - 1: Toggle the MF/AF button on the side of the lens.
  - 2: Look through the view finder at your subject.
  - 3: The focus can be adjusted with the focus wheel at the edge of the lens.

# Set the Shutter Release Mode



- Change the Shutter Release mode to respond to the wireless remote.
  - 1: Press the Button on the back of the camera
  - 2: Use the scroll wheel to select wireless remote.
  - 3: Your settings will be displayed here in the general menu.



# Set the Shutter Speed



- Change the exposure time appropriate for your image.
  - 1: Press the ok Button on the back of the camera to bring up the settings menu
  - 2: Use the scroll wheel to adjust the shutter speed.
  - 3: Your settings will be displayed here in seconds on the general menu.

# Setting the Bulb Shutter Speed

- For indefinitely long exposures, it is useful to use the 'bulb' mode. This opens the shutter and it remains open until the user closes the shutter.
  - **Wireless Remote:**
    - The first click will open the shutter (often after a 2 second delay).
    - The second click will close the shutter. The remote must be pointed at the front face of the camera to be intercepted.
  - **Normal Shutter Release Button:**
    - The user must hold down the shutter release button for the desired exposure length.

# Set the Aperture



- Set the diameter of the lens aperture.
  - 1: Press the Button on the back of the camera
  - 2: Hold the Av button to toggle from shutter speed to the aperture on the display.
  - 3: Use the scroll wheel to adjust the aperture settings.
  - 4: Your settings will be displayed here in the general menu.



# Using the Flash

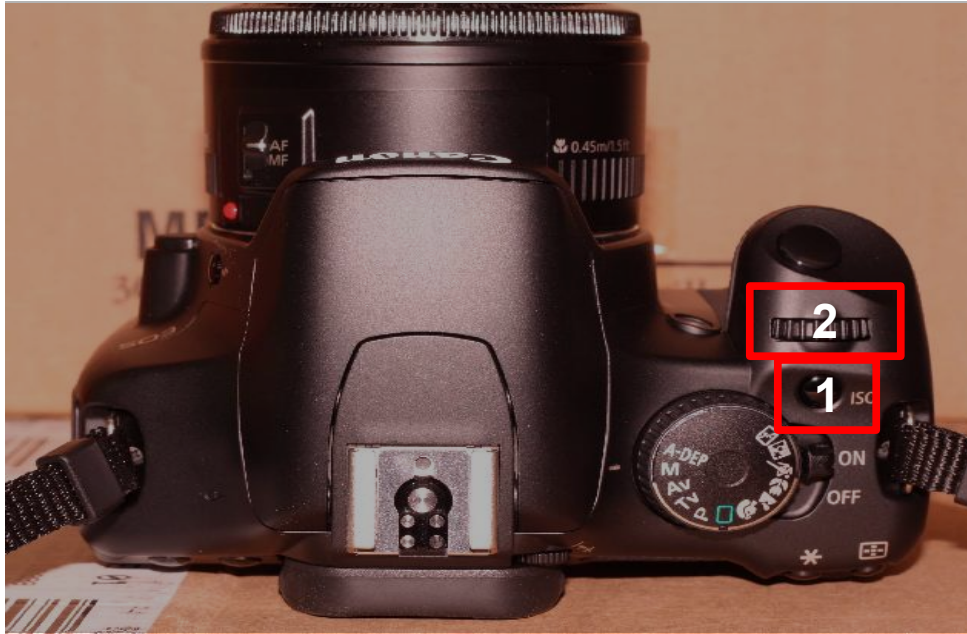
- Use of the flash with these cameras is only possible for shutter speeds slower than 1/200 seconds.

# Set the White Balance



- Adjust the White Balance.
  - 1: Press the White Balance Button on the back of the camera
  - 2: Use the scroll wheel to select wireless the desired White Balance from the screen.

# Set the Light Sensitivity



- Change the ISO.
  - 1: Press the ISO button on the top of the computer.
  - 2: Use the scroll wheel to select the desired ISO for your subject from the display.
  - 3: Your settings will be displayed here in the general menu.



See the TA to Offload Photos.

# Rules of Thumb

Astro-photography is a game of trial and error depending on the specific details of the shooting conditions and the subject.

You will learn the most by experimenting with settings to learn how to create the image you desire.

Stare with the examples in the Orientation Tutorial ...  
and have fun!