Overview

This assignment focuses on understanding and applying white balance settings in photography to achieve accurate color representation. Through practical tasks, students will learn to manipulate white balance for both neutral and creative effects under various lighting conditions.

Learning Objectives

- Understand the concept of white balance and its impact on color temperature and tint.
- Learn how to set white balance using camera presets, Kelvin settings, and custom options.
- Gain practical experience in adjusting white balance for different lighting conditions.

Related Reading

Before you start, read these related blog posts to deepen your understanding:

What Is White Balance In Photography		

Before You Shoot

- ■ Familiarize yourself with your camera's white balance settings and controls.
- ■ Prepare a grey card or ExpoDisc for custom white balance calibration.
- ■ Choose a location with mixed lighting to practice white balance adjustments.
- ■ Set your camera to RAW format to allow for post-processing flexibility.
- ■ Ensure your camera is set to either aperture priority or shutter priority mode.

Assignment Tasks

1. Find a location with both natural light and artificial light sources. Use aperture priority mode at f/4 with ISO 200 fixed, letting the camera adjust shutter speed. Take three photos, adjusting the white balance between daylight and tungsten presets.

2. Using a grey card, set a custom white balance in your camera. Shoot a still life with mixed lighting, ensuring you maintain the same lighting setup for all shots while varying the white balance settings.

3. Photograph a subject under shade and use shutter priority mode at 1/250s with ISO 200 fixed. Experiment with the auto white balance, daylight, and shade presets to compare the results.

4. Select a location with fluorescent lighting. Use aperture priority mode at f/5.6 with ISO 200 fixed. Capture images while adjusting the white balance to the fluorescent preset and custom settings, then compare the outcomes.

5. Set up a portrait session outdoors during the golden hour. Use shutter priority mode at 1/500s with ISO 200 fixed while experimenting with both cooler and warmer white balance settings to see how it affects skin tones.

6. Create a series of three images of a white object under different lighting conditions (tungsten, daylight, and shade). Use aperture priority mode at f/2.8 with ISO 200 fixed, letting the camera set shutter speed. Analyze how the color of the object changes with each setting.

Stretch Tasks

- Create a photo series that explores the emotional impact of different white balance settings on a single subject. Use RAW format to adjust white balance in post-processing for a more refined result.
- Develop a project that requires shooting under challenging mixed lighting conditions (like an event). Use a combination of custom white balance and in-camera presets to achieve the desired color accuracy.

DO / DON'T

DO	DON'T
✓ Do use a grey card for accurate custom white balance settings.	✗ Don't rely solely on auto white balance; take control for better results.
✓ Do experiment with different white balance presets in various lighting conditions.	✗ Don't forget to check your white balance setting when changing locations or lighting.
✓ Do shoot in RAW format to allow for white balance adjustments in post-processing.	✗ Don't ignore the impact of white balance on colors; it can drastically change your images.
✓ Do pay attention to skin tones and how they change with different white balance settings.	✗ Don't shoot in JPEG if you want to make white balance corrections later.
✓ Do take notes on the white balance settings you used for each shot for future reference.	✗ Don't skip using a grey card when aiming for precise color accuracy.

Reflection Questions

- How did different white balance settings affect the mood and tone of your images?
- What challenges did you face when adjusting white balance in mixed lighting conditions?
- How can understanding white balance improve your overall photography skills?
- In what situations would you intentionally use an incorrect white balance for creative purposes?

Technical & Creative Focus

Technical:

- Use the grey card to set a custom white balance for accurate color representation.
- Experiment with different white balance presets to see their effects on colors.
- Adjust the tint slider to correct any green or magenta color casts.
- Observe how different light sources (tungsten, daylight, shade) affect your images.
- Practice shooting in RAW to correct white balance in post-processing.

Creative:

- Experiment with intentionally setting a cooler or warmer white balance for artistic effect.
- Combine different light sources in a single shot to explore mixed lighting scenarios.
- Use white balance creatively to enhance mood or atmosphere in your photographs.
- Try taking portraits with different white balance settings to see how skin tones are affected.
- Explore the concept of color harmony by balancing warm and cool tones in your compositions.