Overview

This assignment focuses on understanding the impact of stability on image sharpness and clarity by comparing handheld shooting techniques to using a tripod. Students will learn how each method affects their ability to control shutter speed and achieve desired results in various shooting scenarios.

Learning Objectives

• Understand the differences in image stability between handheld and tripod photography

• Practice using shutter priority mode to control motion capture

• Learn to apply the 1/(2× focal length) rule for handheld shooting

Related Reading

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

What Is Shutter Speed	Camera Shake	Tripod Techniques
What Is Shutter Speed		

Before You Shoot

■ Select a location with varying light conditions for diverse shutter speed testing

■ Ensure your camera battery is charged and memory card has space

■ Familiarize yourself with your tripod setup and ensure it is stable

■ Decide on specific subjects to capture that require different shutter speeds

■ Set your ISO to a fixed value of 200 to maintain consistent exposure

Assignment Tasks

1. Using shutter priority mode at 1/500s with ISO 200 fixed, photograph a moving subject to analyze sharpness.

2. Set your camera on a tripod and use shutter priority mode at 1/30s with ISO 200 fixed to capture a stationary subject in low light.

3. Shoot handheld using shutter priority mode at 1/125s with ISO 200 fixed, focusing on a subject while adjusting your hold to minimize shake.

4. Compare shots using a tripod at 1/2s with ISO 200 fixed to capture light trails from moving vehicles.

5. Photograph a friend walking towards you using handheld shooting at 1/250s with ISO 200 fixed, noting any motion blur.

6. Capture a sunset scene with a tripod using shutter priority mode at 1/4s with ISO 200 fixed to create a smooth water effect.

Stretch Tasks

• Create a series of images that show varying levels of motion blur from handheld to tripod, analyzing the differences in stability.

• Experiment with different shutter speeds (from fast to slow) while shooting handheld and with a tripod to showcase the impact of stability on motion blur.

DO / DON'T

DO	DON'T
✓ Do use the 1/(2× focal length) rule to determine your minimum handheld shutter speed.	✗ Don't attempt to shoot handheld at shutter speeds slower than the 1/(2× focal length) rule suggests.
✓ Do compare handheld shots with tripod shots of the same subject to observe differences.	✗ Don't forget to secure your tripod properly to avoid camera shake.
✓ Do stabilize your body when shooting handheld by bracing against a wall or using your arms for support.	✗ Don't ignore the effect of wind or movement on tripod stability during outdoor shooting.
✓ Do take notes on the settings used for each shot to track your progress and results.	✗ Don't rush your shots; take time to adjust your position and settings for optimal results.
✓ Do practice in varying lighting conditions to challenge your handheld stability.	✗ Don't assume all shots will be sharp without checking your stability technique.

Reflection Questions

- How did using a tripod change your approach to composition and framing?
- What differences did you notice in sharpness between handheld and tripod images?
- How did your understanding of shutter speed influence your shooting decisions?
- In what situations do you find a tripod most beneficial compared to handheld shooting?

Technical & Creative Focus

Technical:

- Use shutter priority mode to freeze motion effectively
- Experiment with different focal lengths to test stability effects
- Practice the 1/(2× focal length) rule for handheld shooting stability
- Understand the importance of stabilizing your camera when shooting handheld
- Recognize how slower shutter speeds can lead to motion blur when not using a tripod

Creative:

- Use tripod for long exposure shots to capture smooth motion effects like flowing water
- Capture the same scene both handheld and with a tripod to compare results
- Experiment with different angles and perspectives while using a tripod for stability
- Try shooting handheld in low light to challenge your stability skills
- Explore creative motion blur by intentionally lowering shutter speeds with a tripod