



Overview

This assignment teaches you how to utilize shutter speed effectively to either freeze motion or create artistic blur. By understanding how shutter speed interacts with motion, you will enhance your ability to capture dynamic scenes and convey movement in your photography.

Learning Objectives

- Master the use of shutter speed to freeze fast-moving subjects.
- Learn techniques to create intentional motion blur in your images.
- Understand the relationship between shutter speed, aperture, and ISO in controlling exposure.

Related Reading

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

[What Is Shutter Speed](#)

[Long Exposure Photography](#)

[Motion Blur Techniques](#)

Before You Shoot

- Choose a location with moving subjects (e.g., people, vehicles, water).
- Ensure your camera is set to either aperture priority or shutter priority mode.
- Set your ISO to a fixed value of 200 to maintain consistent exposure.
- Bring a tripod if you plan to use slow shutter speeds for motion blur.
- Familiarize yourself with the focal length of your lens to apply the $1/(2 \times \text{focal length})$ rule.

Assignment Tasks

1. Use shutter priority mode at 1/1000s with ISO 200 fixed to freeze a running subject in a park.
2. Capture a moving water scene using shutter priority mode at 1/2s with ISO 200 fixed to create a silky water effect.
3. Shoot a busy street scene with people using aperture priority mode at f/5.6 with ISO 200 fixed, letting the camera adjust shutter speed.
4. Experiment with ICM by moving your camera horizontally while using a slow shutter speed of 1/4s with ISO 200 fixed.
5. Photograph light trails from cars using a tripod at a fixed ISO 200 and shutter priority mode at 2s.
6. Capture a sports event using shutter priority mode set at 1/2000s with ISO 200 fixed to ensure crisp action shots.

Stretch Tasks

- Create a series of images that illustrate a story through motion using both fast and slow shutter speeds.
- Combine motion blur and freezing techniques in a single frame by using multiple exposures.



DO / DON'T

DO	DON'T
<ul style="list-style-type: none">✓ Do vary your shutter speeds to explore different effects on motion.✓ Do keep your ISO fixed to maintain exposure consistency while experimenting.✓ Do practice the $1/(2 \times \text{focal length})$ rule to enhance image sharpness.✓ Do try different lighting conditions to see how it affects motion capture.✓ Do review your images and adjust settings based on the results you see.	<ul style="list-style-type: none">✗ Don't shoot in manual mode with all three exposure variables set manually.✗ Don't forget to stabilize your camera if using slow shutter speeds without a tripod.✗ Don't aim for extreme shutter speeds without considering the available light.✗ Don't ignore the effect of your lens's focal length on motion blur.✗ Don't rush through your settings; take time to adjust for desired effects.

Reflection Questions

- How does changing the shutter speed affect the perception of motion in your images?
- What challenges did you face when trying to capture motion, and how did you overcome them?
- How can you creatively use motion blur in your photography to enhance storytelling?
- In what ways did the priority modes change your approach to shooting moving subjects?

Technical & Creative Focus

Technical:

- Use shutter priority mode to capture fast-moving subjects at speeds of 1/500s or faster.
- Employ aperture priority mode to control depth of field while letting the shutter speed vary.
- For intentional motion blur, set shutter speeds between 1/2s to 2s.
- Utilize the $1/(2 \times \text{focal length})$ rule to avoid camera shake when shooting handheld.
- Adjust your shutter speed based on the type of motion you are capturing (e.g., sports vs. water).

Creative:

- Experiment with intentional camera movement (ICM) while the shutter is open to create abstract images.
- Use a slow shutter speed to capture light trails from moving vehicles at night.
- Incorporate zooming techniques during exposure to enhance the sense of motion.
- Capture images of subjects moving in a consistent pattern to illustrate flow.
- Explore different angles and perspectives to add dynamism to your motion shots.