



Overview

This assignment focuses on understanding and manipulating shutter speed to capture motion effectively in photography. Students will learn to freeze action or create motion blur through specific techniques and settings.

Learning Objectives

- Understand the relationship between shutter speed and motion in photography.
- Learn to use aperture priority and shutter priority modes effectively.
- Develop skills to creatively capture movement through various techniques.

Related Reading

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

[What Is Shutter Speed](#)

Before You Shoot

- Ensure your camera battery is fully charged.
- Select a location with dynamic subjects (e.g., people, vehicles, flowing water).
- Set your camera's ISO to a fixed value of 200.
- Familiarize yourself with your camera's modes (A/Av and S/Tv).
- Carry a tripod for stability when using slower shutter speeds.

Assignment Tasks

1. Set your camera to shutter priority mode at 1/1000s with ISO 200 fixed, and photograph a moving subject such as a cyclist or a running dog.
2. Use aperture priority mode at f/4 with ISO 200 fixed, and capture a scene with people walking in a park, allowing the camera to set the shutter speed.
3. Find a flowing water source and use shutter priority mode at 1/4s with ISO 200 fixed to capture the smooth motion of the water.
4. Capture a busy street with cars using shutter priority mode at 1/500s with ISO 200 fixed to freeze the action.
5. Set your camera to use aperture priority mode at f/2.8 with ISO 200 fixed and photograph a group of dancers in motion, letting the camera decide the shutter speed.
6. Try intentional camera movement (ICM) by moving the camera vertically while shooting at 1/2s with ISO 200 fixed.

Stretch Tasks

- Experiment with capturing light trails from vehicles at night using shutter priority mode at 2s with ISO 200 fixed.
- Use a combination of panning and slower shutter speeds (1/30s) to create motion blur while tracking a moving subject.



DO / DON'T

DO	DON'T
<ul style="list-style-type: none">✓ Do practice shooting in various lighting conditions to understand how shutter speed affects exposure.✓ Do use a tripod for long exposures to avoid camera shake.✓ Do experiment with different shutter speeds to see the effects on motion.✓ Do take multiple shots of the same scene with varying shutter speeds to compare results.✓ Do review your images to evaluate the effectiveness of your shutter speed choices.	<ul style="list-style-type: none">✗ Don't use manual mode to set all exposure variables; focus on priority modes instead.✗ Don't shoot at shutter speeds too slow without a tripod, as it may lead to unwanted blur.✗ Don't forget to check your camera settings before shooting.✗ Don't underestimate the creative potential of motion blur in your images.✗ Don't limit yourself to one style of capturing motion; explore various techniques.

Reflection Questions

- How did different shutter speeds affect the way motion was captured in your images?
- What challenges did you face when trying to freeze motion or create motion blur?
- In what scenarios do you think one technique is more effective than the other?
- How did the use of priority modes change your approach to exposure settings?

Technical & Creative Focus

Technical:

- Use shutter priority mode to freeze fast action, setting the shutter speed to 1/1000s or faster.
- Utilize aperture priority mode to control depth of field while allowing the camera to adjust shutter speed.
- Apply the 1/(2x focal length) rule to avoid camera shake when shooting handheld.
- Experiment with ND filters to extend shutter speeds in bright conditions.
- Adjust your shutter speed according to the speed of your subject for optimal results.

Creative:

- Capture the motion of a busy street scene using shutter priority mode at 1/500s.
- Experiment with intentional camera movement (ICM) while using a slower shutter speed of 1/2s.
- Create light trails during nighttime by using a long exposure time of 1-2s.
- Focus on capturing water movement by shooting at 1/4s to create a smooth blur effect.
- Use zooming techniques while shooting to give a sense of motion and depth.