

## Stop Motion Animation Syllabus

Produce your own movie using digital cameras and stop motion video capture software. Apply your creativity in story-telling, learn to use stop motion capture software and study animation techniques. As part of the movie production, you will also learn how to record audio sound effects and import music to combine with our videos. We will learn about the history and science of animation, including how video and audio information is stored. The class will conclude with a film festival to screen our creations.

### Week 1:

- History of Animation and Animation Science: Persistence of Vision - explore how animation works.
- Learn Stop Motion Animation Software (SAM Animation) and digital camera - learn the basics for setting up your stage and camera; learn image capture, editing and playback controls.
- Begin Animation Introductory Project - Mr. Blob - students learn the SAM Animation software while creating a simple movie of a blob moving.

### Week 2:

- History of Animation and Animation Science: Persistence of Vision - perform a short experiment to demonstrate this phenomenon.
- Students learn about animation techniques and use controls for creating a title screen and ending screen with credits.
- Students practice using the SAM Animation software to complete the introductory project.

### Week 3:

- History of Animation and Animation Science: Winsor McCay
- Animation Project - Storyboarding introduction, puppet making (begin)
  - Learn to storyboard ideas to plan and organize movies.
  - Explore techniques for creating film characters.

### Week 4:

- History of Animation and Animation Science: Eye Anatomy - structure and function.
- Animation Project - Filming - Learn and use controls for filming and editing.

### Week 5:

- History of Animation and Animation Science: Eye Anatomy - rod and cone cells, blind spot, optic nerve.
- Animation Project - Introduce creation and importing audio tracks and controls.

### Week 6:

- History of Animation and Animation Science: Science (Astronomy/Technology) - Using stop motion to observe the apparent diurnal motion of the stars (Earth's rotation on its axis)
- Animation Project - Continue filming and learn how to editing audio tracks - creating loops, changing start and end points.

### Week 7:

- History of Animation and Animation Science: Max Fleischer and the rotoscope

- Animation Project - Complete filming and final editing.

**Week 8:**

- History of Animation and Animation Science: History - Compression Algorithms – learn about sound compression, specifically MP3 technology.
- Animation project wrap up and DVD creation.
- Film festival – students share their creations, parents are welcome to join us.

