Scene Brief	Screen	VO	Duration
Introduction	Title Card, Three of Us in Formal Attire	Hi! We're three students from Dr. Edwards section of English 1102 at Georgia Tech. In this video we plan to take you through some early camera technologies and their relationships to film as an industry. Specifically, we plan to show you how the development of camera movement technologies and color film allowed the film industry to differentiate itself from theater and thrive.	30s
Introduction to Film	Early film montage	Film is complex and has come a long way since its invention. The earliest films were similar to theater. They both presented audiences with a moving visual scene, and later they both had sound. Although film also competed with theater on the basis of reproducibility, camera innovations played a large role. As technologies improved, directors were able to be more creative and break existing practices, using extravagant camera technologies to provide the audience with different ways to view the action. In the beginning camera movements provided audiences with new perspectives, and later the addition of color allowed film to recreate life even more accurately. Eventually, this allowed film to differentiate itself from theater.	60s
Camera Movement	Image of thinking of different place / train clip (with text banner of 'L'Arrivèe d'un train en gare de la Ciotat, Louis Lumière, 1895') (until 'story') Show image of on location set	Directors were able to create unique effects, placing audiences in the setting around the story, since cameras could be placed in dangerous or distant places. This was something theater could not do with just props.	15s

	Let Me Dream Again (1900) w/ text banner	Directors then started using focus pulls to show character's inner thoughts and emotions. One example lies in the film, Let Me Dream Again, where the main character is dreaming and realizes he is with an ugly woman. The effect of showing thoughts with realistic images and memories separated films from the theater which relied on sets for settings.	20s
	The Sick Kitten (1903)	Along with focus pulls, directors started using close ups that gave everyone in the audience a "front row seat," allowing everyone to see smaller details. With theaters, only a small number of people could see well.	15s
	The Great Train Robbery (1903) https://vimeo.com/152838314 Panorama of Eiffel Tower (1900) https://www.youtube.com/watch?v=XHBUDnz6AdQ	In order to further this, directors began using pans and tilts. These empowered the audience, as it made them feel as if they were turning their head. These movements also made places feel grand and allowed people to feel as if they are in the stories.	15s
	Tracking shot	As camera dollies are used, films start using tracking shots to make audiences feel as if they are walking with the characters and experiencing the story.	
	Famous *Gone with the Wind* (1939) dead bodies shot	Once cranes are used, films allow characters to experience flight, feel grand, and enjoy the story. Boom shots are where the camera flies away and leaves the world behind.	

	https://www.youtube.com/watch?v=idle_UTEAvs		
	Show Boat (1936) https://www.youtube.com/watch?v=eh9WayN7R-s	Camera movement techniques gave films a unique identity. They made the audiences experience the story rather than simply watch it. Theater could not accomplish the same task in a similar manner. With 6 - degrees of freedom (show 6DOF image), directors were able to create amazing visuals. As film grew, it started to compete with itself and improve its own quality.	
Early Camera Tech	Slide of Early Camera Tech (possibly a PPT slide view) Color Intro - Condense into length of audio	Just like the camera movement, the industry has been regularly playing with ways to get the stage closer to the life of audience.	10s
Pre-Technicolor Era	Image of Charles Urban Show image of Edward Raymond Turner, zooming out on him until his name is mentioned - switch to image of Charles Urban until end of this section	One of such attempts that later proved to be successful was ignited by the English film producer, Charles Urban. Recognizing the academic marvel of Edward Raymond Turner and his interest in the image-capture technology, Urban sponsored him in his research to create a camera that could capture motion without losing the color.	25s
	Image of Turner's three-color camera switch to Turner-Lee Camera and keep on it	In 1899, Turner developed a camera that used a rotating disk of three color filters to photograph on the same roll of B/W film. However, since the three versions of the image were not recorded at the same time, fast-moving objects often appeared blurred on the screen when the three versions were projected together.	25s

	until “projected together.” Switch to portrait of George Albert Smith and keep on it until the end of this section	Soon after the death of Turner in 1903, Urban passed on his work to George Albert Smith who improved the overall prototype.	10s
	Image of Kinemacolor Stay on image of Kinemacolor until “named Kinemacolor.” Switch to the clip from A Visit to the Seaside (1908) after that. “A Visit to the Seaside (1908)” on screen while clip is being played.	In 1906, Smith patented a simplified version of Turner’s camera that he later named Kinemacolor. It used red and green filters in the shutters of its rotating aperture to record the images on a B/W film. Using the two-color process reduced the color flickering but did not quite eliminate it.	20s
	Illustration of Chronochrome Show image of Chronochrome until “in 1913.” Switch to Nice (1913) clip after that. “Nice (1913)” on screen while clip is being played.	In an attempt to improve the color motion picture production, French film entrepreneur and inventor, Leon Gaumont, came up with Chronochrome in 1913. His device used three lenses with different color filters to capture the film simultaneously on three different films, which were then played simultaneously using the projector. This nearly eliminated the color flicker since everything was recorded simultaneously, and also introduced the world to 16:9 widescreen ratio as a by-product.	30s
Introduction of Technicolor	Clip of Technicolor Logo (https://www.youtube.com/watch?v=exZvZw4wS84)	Innovations happening all across the film industry soon gave birth to Technicolor, the company that later went on to lead the film industry on its path to introduction of color in cinemas.	15s

	- condense the clip to the audio length - cropping preferred over speed change		
Technicolor Era	Show image of Technicolor Process 1 “The Gulf Between (1917) - Technicolor Process 1” on screen while clip is being played	One of the first advancements that came through the company was the use of a beam splitter to record red and green filtered images simultaneously. This model further improved on the Chronochrome, and since only one lens was used, objects nearer to the camera could be recorded without any color flicker.	20s
	Clip of Dye Imbibition Process “The Viking (1928) - Technicolor Process 3” on screen while clip is being played	To eliminate the complications of having to use multiple film prints simultaneously, Technicolor came up with the process of dye imbibition in which dyes from the different film prints were transferred onto a one-sided print.	
	Play Technicolor Process 4 Clip “Ramona (1936) -Technicolor Process 4” on screen while clip is being played	The overall color film production process was, however, a lot resource consuming, which led to the major film producers abandon the color photography altogether. In 1932, the introduction of a dichroic beam splitter sandwiched between two 45-degree prisms to record the three film prints simultaneously made the overall process comparatively more feasible and attracted the attention of film producers back again.	
		The combination of technological advancements in camera movement and color photography brought the cinema curtains closer to the audience with every passing decade. People could now relate their lives with what they were watching on the screen which made films	

		more popular than plays with time.	
Outro	Film montage	In the end, film wildly outgrew theater and thrived as the world's most popular entertainment medium. In 2018, the highest grossing film, Black Panther, made over 700 million dollars, while the highest grossing play, Hamilton, only made around 162 million dollars. While yes, a lot of this has to do with the accessibility of film, a large portion of this huge discrepancy is due to the technological advances that now allow films to tell stories in innovative ways. This continues today, with CGI extremely prevalent in the highest grossing blockbusters, and will continue for some time. Who know where film will end up?	