Nicole Emmons | Session 2:

Let's Animate!: Pre-Production

List of Required Supplies: Phone, masking tape, clear tape id desired, table, modeling clay, poster board or other paper to create background, Notebook, pen/ pencil (You can also use toys or objects to animate with.)

Space/Facility Requirements: floor space (or if you have a phone attachment that will connect phone to tripod/ tripod then table space) at least 3 feet square of space.

Student Time Required: 60 - 120 minutes

Additional Links:

Stop Motion Studio (there are both free and paid versions- we are using the free version with this course, but if you want to purchase the "pro" version it is $5 for iphone and android, and $10 for computer. It just comes with enhanced features.)
Software link: https://www.cateater.com
You can also find it on google play or the app store.

Step-by-step Instructions

Start: Download Stop Motion Studio onto your phone.
Spend at least 15 minutes going through the tips provided in the software. They have provided great detailed info on all of the features!

Set up: Once you have downloaded the software, you need to set up your "camera" (which is your phone!) and set up your shot. Select the + symbol on the software and this opens a new movie. Make sure the space where you will be animating is clear of any objects that you do not want in your video. You can call this first shot a test shot, this is just to practice and get to know how the software works, and try some basic animation with your modeling clay.

In stop motion, you can set up your camera to shoot towards the wall or towards the floor. Towards the floor is called "**down shooting**." Down shooting is a great way to get started as you can concentrate on learning some animation basics and not have to worry about things falling over.

In animation, it is very important to "**lock off**" anything that you do NOT want to animate. This means: your phone, your **tripod**, a *three legged stand used for supporting a camera or other apparatus*. (Or, if you are taping your phone to a table and shooting on the floor, you want both the phone and the table to not move.) Also any props or set pieces that are not supposed to be moving (like walls or floors.)

You can use masking tape to tape things down. Clear tape can be used doubled up behind backgrounds to stick them to floors, tables, walls. Make sure that you don't see the tape in the **frame**. *(Noun) A single complete picture in a series forming a movie. Also used as a verb, to frame; to create an image, also to compose*

For this first test don't worry too much though, just get the camera set up and let's start animating! Set your frame rate to 8fps in the settings menu, which is found by selecting the gear icon. You can change this later to see how your animation looks at different **frame rates**. *(The amount of individual video frames that your camera captures, expressed as fps, or frames per second.)*

Try: Character Enters Frame (Take 6-10 pictures)
- Take a picture with no objects in the frame.
- Move the character or object into the frame so you barely see it, and take a picture. Move the character into frame a little bit more, and take a picture.
- Keep moving the character in small increments, stopping to take a picture each time. Make sure your hands are not in the frame when you take the picture!

Note: In animation, more pictures/frames taken means more video time, and this means the object will go slower. Less pictures/frames means less time, and the object will move faster.

Also: you want your object to move along a path, with each movement relating to the one before it. Your animation will appear smoother the more you pay attention to the overall path, or **arc**, of your character. You can see the pictures you took before by using the slider tool on the side of the screen. This helps you keep your animating on track.

If you do accidentally take a picture with your hand in, you can easily delete it with the software by: Hitting the Backwards arrow button at the top left of the screen takes you to the timeline, where you can see all of your frames. Tap the frame you don't want, and hit the scissor/ cut icon. Hit the Camera Icon again to go back to animating.

When the character is in the frame, have it do an action. It could spin around for example. Take at least 24 frames. You can watch your animation as you go by hitting the forward arrow below the big red circle button.

Now that you have tried out the software and some animation, let's start to think about what kind of story you would like to tell. For your first film, keep it simple!

Basic narrative structure. Most "**narrative**" (*A spoken or written account of connected events; a story*) films have a central character who encounters a problem, and the story is about how they solve (or sometimes do not solve) this problem, and how they are changed by this experience. They also usually have a beginning, middle, and end. Some examples of a simple concept would be: a character is hungry. (Problem or conflict: hunger. Beginning) Character looks for food (tries to solve problem. Middle.) Character either does, or does not, find food. How is character changed by this experience? (The resolution, or end.)

Spend some time writing down your simple idea.
Make sure it has a main character, and a beginning, middle, and end. If you would like to add more than one character you can, just remember you are adding action you need to keep track of in your scene. If you add so much that you get overwhelmed with your idea, you can always edit, or cut, it out before you even start shooting. You can save those ideas for a future film.

Note: We are going to keep our first short film to about 30 seconds long.

How many frames is that?
- If we shoot at 24fps, that is 720 frames.
- If we shoot at 12fps, that is 360 frames.
- If we shoot at 8fps, that is 240 frames.