TAP Animator Creed: Virtual Learning Edition

1 we show respect

We are a team. We live up the same expectations as we would in person.

2 we take care of our technology

We respect all equipment. We mute ourselves when we are not speaking. We do not talk over our teammates.

3 we focus

We have a lot to learn. ALL our attention is focused on the class. We do our best to limit distractions around us. We wear headphones if possible

4 we participate

We speak up; we ask for help when we need it

5 we own the content

This is our class. This is our opportunity to learn more about the animation field.

6 we attend class

Our voices and ideas are valued. We log into class on time and stay until the end whenever possible.
Welcome to The Made In New York Animation Project NeOn Summer Edition:

Session 4 - Modeling
Opening

Name one object or thing that has meaning to you.

What about that object brings its meaning?

Share it!
Technical Lesson: Modeling
Terminology
What is “Modeling”? 

What do you think modeling entails? Is it when the artist takes shapes and transforms the figures based off of real life?
Examples
Video example
Terms

- **3D Modeling** - The process of creating characters, shapes, and/or objects in a 3d space.
- **Topology** - The structure of shapes that make up objects (splines, squares, and triangles).
- **Polygons** - shapes that are on a 3D model/object surface (Square or Triangular).
- **Vertex** - A point within the 3D space.
- **Extrude** - Pulling and/or pushing of polygons.
Topology

BAD

GOOD
Polygons
Vertex
TAP Film
Krump Wars Episode 3: The End Frame
Krump Wars Episode 3: The End Frame - PS 184: Reflection

Share Verbally or in the Chat:

What are some things you notice in the film?
Video Demonstration
pretty much the head, the neck, the shoulders, arms. Everything
Advanced Examples
How Thanos Was Created in Avengers: Infinity War

How Thanos Was Created in Avengers
Infinity War
Digital Domine & Weta

Sculpting THANOS in 11 Minutes
by flippednormals
Medical & 3D Printing
Printing Prosthetics

Fusion 360 Reverse engineering of prosthetic foot

Using SOLIDWORKS & 3D Scanning for prosthetics design
Architecture
Stylized Game Modeling
Career Opportunities

3d Character Modeler - creates monsters, humans or any other creatures.

3d Environment artist - Artist creates landscapes and props in 3d (Buildings, rocks, trees, etc)

Engineering - Modelers in engineering uses 3D software to design the mechanical parts and devices.

Medical fields - Modelers make 3D replicas of human skeleton/muscular/ nerve systems, and other forms of biology for 3D printing.
Resources

- **Autodesk Software** - 3D Computer Animation, Modeling & Rendering Software (3ds Max, Maya, mudbox, & Autocad, etc)
- **Zbrush** - Digital sculpting tool that combines 3D/2.5D modeling, texturing and painting; Sculptris is a free version for basic sculpting.
- **Catia** - Engineering software used in mechanical, civil, and aeronautical engineering.
- **Blender/ Unreal Engine** - A free and open-source toolset used for creating animated films, visual effects, motion graphics, virtual reality and computer games.
Questions & Answers
Frequently Asked Questions

What separates something from looking fake? Professional/Unprofessional?
The amount of detail and organization put into the model.

Should I become a better illustrator in order to model?
It’ll help to have some drawing skill in order to help visualize objects, but is not required.

What skills can benefit me in the real world to bring over to the digital?
Observation and hand eye coordination, as well as a good attention to detail.

Should I take classes on modeling? Where can I take classes?
You can take sculpting, figure drawing, 3D modeling classes. There are also digital courses online and many other free resources.
Creative Engagement
Creative Engagement

Take 15 minutes to create your own model!

1. Grab up to 2-5 objects near you (i.e., paper, household objects, a leaf, rock)

2. Use your chosen objects to create (i.e., fold/model/transform) something you need in this moment

We invite you to draw your model in 2D if you wish!
Things to Reflect On

○ What shapes do you see in your creation?
○ What are the features of this creation?
○ What are its strengths and weaknesses?
○ How have the objects transformed? How has your creation grown?

Share an image of your model!
Closing

Body Modeling

1. The **first person** will start us with a small and simple body pose.

2. The **next person** will mimic that pose yet add a small change to it.

3. Then **the next person**, and so forth!

If you do not have your video on, share the next movement in the chat and those of us on screen will model it for you!
Materials needed for next group:

3 household materials:

- Paper
- Writing utensil
- Any art materials
If you would like to share your **ARTWORK** and have the chance to have your work featured in our Mega Groups, send submissions to:

`submissions@theanimationproject.org`

If you have **QUESTIONS ABOUT THE SUMMER PROGRAM** that are not answered on the FAQ page of our website, reach out to:

`neonsummer@theanimationproject.org`

If you have **QUESTIONS ABOUT INCENTIVES** that are not answered on the FAQ page of our website, reach out to:

`tapincentives@theanimationproject.org`
Thank you for attending this group!

Visit https://www.theanimationproject.org/minyap-neon-summer-edition-faqs for FAQs, group materials, access to slide presentations, and Mental Health Resources.

Check out our social media for more information about the TAP Weekly Challenges!