

Intro to 3D coat and 3D concepting

With Norris Lin

Course Objective:

- 3Dcoat sculpting and PBR texturing
- Blender lighting and scene setup
- 2D + 3D ideation and iteration
- Incorporate both 2D & 3D tool to problem solve complex designs
- Advanced photoshop technique
- 3D Coat(Design ideations. Modeling and sculpting)
- Substance painter (Advanced texturing tools)
- Blender(Scene set up, lighting/texturing)

Week 1

- **Project 1A- Sci-Fi prop (energy core)**
- Introduction to 3D coat
- UI Interface/Navigation
- Similarities between 3D Coat & Photoshop
- Basic voxel tools(sphere, 2D paint, cut off, pose)
- Symmetry
- How to work efficiently with resolution
- Custom hotkey
- Basic b/w render(graphical approach)
- Ideation and iteration
- Think about the project you want to develop over the entire course

Week 2

- **Project 1A - Sci-Fi prop (weapon)**
- Continue on Voxel tools
- Layer organization
- Voxel hide/2D paint act as hide/object-ify hidden/voxel extrude
- Refinement & Detailing

Week 3

- **Project 1B - Sci-Fi prop (Vehicle)**
- Custom Alpha
- Advanced Voxel tools (sketch tool,voxel layer, voxel extrude)
- Kit bashed with your own assets to come up with different designs

Week 4

- **Project 1C - material & texturing in substance painter**
- Import and export
- Finalized your design
- Model preparation for texturing
- High poly to low poly process
- Baking
- Get ready for texturing in substance painter
- Introduction to substance painter p1

Week 5

- **Project 1D - material & texturing in substance painter pt2**
- Introduction to substance painter p2
- Texturing basic
- Create your own material
- Make your own decal sheet

- **Project 1D - Asset assemble & kit bashed variants**
- Final export from substance painter to blender
- Asset assemble
- Utilize blender Add ons to speed up the process
- **Blender basic introduction on texturing, lighting and rendering**
- Basic scene set up and lighting in blender
- Kit bashed designs variants

Week 6

- **Project 2 - Scenery building project kick off (research and reference)**
- 1 interactive hero prop and 1 scene (please check bottom page for potential scenery idea and assets list)
- Architecture(buildings) & terrain
- Building/structure design
- Stencil and custom alpha stamps

Week 7

- **Project 2 - Scenery building project Continue**
- Set dressing props
- Surface/Organic sculpting tools

Week 8

- **Project 2 - texturing**
- Preparing assets and texturing in substance painter
- Adding details and decals
- Finalizing texture

Week 9

- **Project 2 - Scene assemble and Finalize**
- Export & import assets and textures from Substance painter to Blender
- Scene assemble in blender
- Render images
- Photoshop paintover
- Review World building project progress

Week 10

- Final presentation of 2 Final shots of your scene building project (1 interior + 1 exterior)
- With callout designs(character/creature, prop/architecture)
- Guests
- Q&A

Scenery examples:

1. sci-fi corridor space station

- power core
- Control hub
- Crate sand boxes
- Cable
- Wall and floor Panels
- Gate

2. Mech/ vehicle hangar

- mech
- Stairs
- Crane/lifting device
- Assembly device
- Control hub
- Transport platform

3. Post- apocalyptic outpost

- main building
- Powering structure(wind, nuclear)
- Weird rock terrain
- Vehicles(bike, dune buggy)

4. mining factory

- Mining structure
- minerals
- Mining communication/storage structure

5. Fantasy gateway/temple/facade

- Arch
- column/pillar
- Facade
- props(light source)

6. Fantasy Altar

- Altar design
- Ruins
- tree

7. Steampunk laboratory