



3D Environment for Animation Film

Course Description:

This course focuses on creating 3D Environments for Animation Films. The course covers step by step the stages of 3D environmental scenes whether internal or external from hard surface modeling till rendering and compositing.

Course outcomes

- Learn digital sculpting and hard surface modeling
- Understand how 3d lighting works and its interaction with materials
- Learn how to texture your 3d models using different techniques and software
- Create Full rich 3D environment modeled, sculpted, textured, lighted and rendered

Course Prerequisite

3D Modeling and Texturing course *or* equivalent knowledge with the 3D basics

Course Duration 20 Classes

Course Contents

Class 1 (Orientation)

- An overview of production pipeline
- Being an environment artist. What does that mean?
- Tackling blender and Zbrush.

Class 2 (Intro modeling for production)

- Modeling process breakdown
- Tackling a concept art (preferable to be one of concept art course)

Class 3 (Cont. Intro modeling for production)

- Refining details on high poly

Class 4 (Cont. Intro modeling for production)

- UV mapping and export a checkpoint for client
- Prepare the model for texturing phase

Class 5 (Intro Texturing for production)

- PBR introduction and Substance Painter, Substance Designer intro
- Model textures baking

Class 6 (Cont. Intro Texturing for production)

- Creating a tiling material in designer

Class 7 (Cont. Intro Texturing for production)

- Texturing an asset in substance painter
- Presenting work in marmoset for portfolio and export a checkpoint for client

Class 8 (Intro environment scenes)

- Gathering references and blocking out the main scene

Class 9 (Cont. Intro environment scenes]

- Create material library for the project

Class 10 (Cont. Intro environment scenes)

- Main prop modeling and sculpting

Class 11 (Cont. Intro environment scenes)

- Main prop texturing
- Wrapping up everything together

Class 12-16 (Lighting and Shading)

- Lighting basics quick review

- Lighting our scene
- Construct our shading network
- Advanced shading techniques
- Texture polishing
- Tri-planar & color correction
- Volumetric effects

Class 16-18 (Rendering)

- Render layers
- Rendering optimization
- Prepare rendering AOVs for compositing
- Rendering tips and tricks

Class 19-20 (Compositing)

- Multi-pass compositing basics in Nuke
- AOVS manipulation color grading and motion blur
- Z-depth, bloom and glare effect
- Finalizing the composite

Grading

Student needs at least 80% grade to pass the course

Attendance: 10%

Class exercises: 15%

Assignments: 25%

Final Project: 50 %

Attendance Policy

- Every class absence is 5% reduction in the final Grade.
- Student missing more than 2 classes will be failing the course