3D Modeling & Texturing

Course Description:
This course is an introduction to building the 3D world covering the processes of modeling, texturing, shading, and lighting. The course also introduces 3D sculpting on Zbrush.

Duration: 12 Classes

Course Outcomes
- Create 3D Models with texture and shading
- Understand the lighting and the rendering basics.
- Getting introduced to 3D Digital Sculpting on Zbrush
- Creating a simple 3D scene from scratch.

Class 1
- History of CGI.
- Navigating the 3D space
- 3D axes
- Organizing objects through hierarchies

Class 2
- Geometry definition and components.
- Geometry modeling methods (polygon and patch based).
- Basic sculpting in 3D

Class 3-4
- Shaders basics and common parameters
- Material types and advanced material
- Normal, bump, displacement
- Texture projection and UV mapping

Class 5
- Texturing on substance painter

Class 6
- How light works
- Light types and common parameters
- Indirect lighting (GI) and shadow

Class 7
- Basics of Rendering
- Camera types and camera parameters
- Render layers and AOVs.
Class 8

- Intro to Zbrush software

Class 9-10

- Creating 3D sculpted objects in Zbrush

Class 11-12

- Themed final project

Grading Policy

Student needs at least 80% grade to pass the course

- Assignments 20%
- Final Project 60%
- Class exercise 10%
- Attendance 10%

Attendance Policy

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