

3D Art I: Modeling*

COURSE DESCRIPTION: This course introduces students to 3D modeling tools and concepts. Using Blender, the popular open-source 3D modeling package, students learn the basics of creating shapes, adding textures and lighting, and rendering. By the end of the course, students produce a series of increasingly sophisticated projects for their 3D portfolio. This course is suitable for students with no prior experience in 3D game design or digital media authoring tools.

PREREQUISITES: None

COURSE LENGTH: One Semester

REQUIRED TEXT: No required textbook for this course

MATERIALS LIST: A 3-button mouse or trackpad

COURSE OUTLINE:

Unit 1: Semester Introduction

- Lab 1: Start the Course
- Lab 2: Set Up Your Computer
- Lab 3: Set Up a Browser
- Lab 4: Download Resources and Assignment

Unit 2: Project 1

- Lab 1: Getting Started
- Lab 2: Transform a 3D Object
- Lab 3: Save Files
- Lab 4: Create a 3D Object
- Lab 5: Render 3D Objects

Unit 3: Project 2

- Lab 1: Make a House
- Lab 2: Create the Roof

- Lab 3: Paint the House
- Lab 4: Add Materials to the House
- Lab 5: Render the House

Unit 4: Project 3

- Lab 1: Create a Creature
- Lab 2: Add Body Parts
- Lab 3: Add More Body Parts
- Lab 4: Mirror the Body
- Lab 5: Add a Face
- Lab 6: Make the Creature Colorful

Unit 5: Project 4

- Lab 1: Animate a Character
- Lab 2: Name the Bones
- Lab 3: Attach the Bones
- Lab 4: Create Keyframes
- Lab 5: Render Your Animation

Unit 6: Project 5

- Lab 1: Create Terrain
- Lab 2: Add Grass and Dirt
- Lab 3: Add a Sky Backdrop
- Lab 4: Add a Moon

Unit 7: Project 6

- Lab 1: Build a Car
- Lab 2: Create a Car
- Lab 3: Paint the Car
- Lab 4: Move the Car

Unit 8: Project 7

- Lab 1: Make a Scene
- Lab 2: Follow the Path

- Lab 3: Adjust the Animation
- Lab 4: Open the Door
- Lab 5: Finish the Scene

Unit 9: Final Assignment

* = One semester (.5 credit) course