Maya Animation

Maya Animation: Level 1

Nature of the Course: Theory + Practical Total Hours per Day: 2 Hours Course Duration: 6 Weeks

Course Summary

The DTC - Autodesk MAYA course is designed to provide a basic grasp of the concept and operation of Autodesk Maya, and to enable new users to understand the user interface and operate Autodesk Maya freely, as well as to understand the industry's production pipeline and workflows. Creating and manipulating 3D assets in the application and creating appealing looks using Autodesk Maya's surfacing tools as well as learning how to influence the mood of the scene with Autodesk Maya's lighting capabilities are among the subjects covered in the course. The training course also covers how to use Maya's animation tools to bring 3D objects to life, how to move through AutoCAD utilizing primary navigating tools, and how to understand the concept and approaches for drawing.

Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

- 1. Has attended 90% of all classes held
- 2. Has received an average grade of 80% on all assignments
- 3. Has received an average of 60% in assessments
- 4. The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

Required Text Books

- 1. George Maestri, "Maya at a Glance", Sybex.
- 2. Adam Watkins, "Getting Started with 3D in Maya", Routledge.
- 3. Jana Germano, "Simplifying Maya", And/Or Press.

Course Details

WEEK 1 & 2

MAYA INTRODUCTION

- Introduction to the 3D environment
- Understanding the 3D pipeline
- The Autodesk Maya User Interface

WEEK 3 & 4

3D MODELING

- Basics of 3D modeling tools
- Inorganic Modeling (Modeling everyday items)
- Set modeling (Of students choosing)
- Organic Modeling (Character Body, hand and head)
- 3D Modeling question and answer session

WEEK 5 & 6

3D TEXTURING

- Introduction to materials and textures
- The Uv space and texture Projection
- Texturing inorganic objects
- Texturing Organic Models
- 3D Texturing questions and answer session

LABS

Lab assignments will focus on the practice and mastery of contents covered in the lectures; and introduce critical and fundamental problem-solving techniques to the students.

Maya for Animation: Level 2

Nature of the Course: Theory + Practical Total Hours per Day: 2 Hours Course Duration: 6 Weeks

Course Summary

The DTC - AutoDesk MAYA course is designed to provide a basic grasp of the concept and operation of Autodesk Maya, and to enable new users to understand the user interface and operate Autodesk Maya freely, as well as to understand the industry's production pipeline and workflows. Creating and manipulating 3D assets in the application and creating appealing looks using Autodesk Maya's surfacing tools as well as learning how to influence the mood of the scene with Autodesk Maya's lighting capabilities are among the subjects covered in the course. The training course also covers how to use Maya's animation tools to bring 3D objects to life, how to move through AutoCAD utilizing primary navigating tools, and how to understand the concept and approaches for drawing.

Completion Criteria

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- 2. Has received an average grade of 80% on all assignments
- 3. Has received an average of 60% in assessments
- 4. The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

Required Text Books

- 1. Autodesk, "The Art of Maya", Autodesk Maya Press.
- 2. Lee Lainer, "Maya: Professional Tips and Techniques", Autodesk Maya Press.

Course Details

WEEK 1 & 2

RIGGING

- Introduction to deformers in Maya
- Constraints and joints
- Skinning and Parenting

- IK and FK systems
- Rigging a Human body
- Rigging question and answer sessions

WEEK 3 & 4 ANIMATION

- Introduction to animation
- 12 principles of animation
- Keying frames in maya
- Animating bouncing ball
- Animating a pendulum
- Animating a walk cycle
- Animating a scene with dialogue

WEEK 5 & 6

LIGHTINING AND RENDERING

- Introduction to lights
- Camera Uses and Rendering

LABS

Lab assignments will focus on the practice and mastery of contents covered in the lectures and introduce critical and fundamental problem-solving techniques to the students.

Learning Outcomes

- Learn the fundamentals of Autodesk Maya.
- Understand the texturing process and apply color to all modeled items.
- Understanding of the numerous steps involved in the creation of an animation from start to finish.
- Describe the purpose and importance of storyboards in the creation of animated films.
- Explain the steps involved in blocking and posing a character.
- Ability to use Maya software to visualize a design utilizing basic rendering and animation techniques.