

COURSE CONTENT

Course Code	DT2016
Course Title	3D Character Animation
Pre-requisites	DT2000 and DT2001
No of AUs	3 AUs
Contact Hours	39 Contact Hours

Course Aims

In this practical course, you will aim for a high standard of proficiency in 3D character animation. You will explore character animation from still poses to animated sequences, using a variety of models ranging from simple objects to human and animal. You will investigate body mechanics, movement and basic acting, using a range of specialist workflow techniques and software tools. This course will prepare you for more sophisticated application of these techniques in a more complex context

Intended Learning Outcomes (ILO)

By the end of this course, you should be able to:

1. Identify key principles of character motion within the 3D computer environment.
2. Apply correct body mechanics to a character interacting with a 3D computer environment
3. Demonstrate proficiency with computer animation work flows and techniques.
4. Creatively apply principles learned in class to your own animations.
5. Critique your own work and your peers' work in a clear and constructive manner.

Course Content

- **Animation mechanics.**
You will receive an overview of key concepts and theories around the creation of motion through computer animation. You will perform exercises using simple models which will reinforce a range of techniques and principles.
- **How to animate in 3D space.**
A series of lectures with examples will present an overview of the unique characteristics of creating movement in the computer 3D environment. You will then perform a series of exercises to provide experience working in this medium. An emphasis will be placed on technique, workflows and best practice, in order to create expressive, efficient animations.
- **Exploring and expanding pose weight and attitude in relation to human motion**
Building on your existing skillset, you will explore and expand upon key principles and concepts of complex natural motion. Through the use of a live action and animation examples you will apply advanced concepts in the creation of character motion in a range of camera views and interactions with the computer generated 3D environment as well as other 3D characters.
- **Transfer the knowledge acquired to your own personal work.**
Through a series of exercises and in-class projects, you will explore the different types of animation challenges pertaining to creating your own original movement. This will enhance and expand your understanding of weight, staging, timing, and acting.

