

# Syllabus

Course Title: ACM 216 3D Animation

Credits: 3

Semester and Year: Spring, 2007

Class Size: 20

Class Schedule: M, F 12-1:15

Class Location: CR212

## Instructor Information

Linda Dorn  
Campus Address: Crawford 312  
Phone: 956-3352  
E-mail: ldorn@hawaii.edu

## Required Materials

### Texts:

“Disney Animation: The Illusion of Life”, Ollie Johnson & Frank Thomas (1995)

### Materials:

9x12 or Larger hardbound Sketchbook

### Recommended Text:

“The Animator’s Survival Kit”. Richard Williams, Faber & Faber, (2002)

### Recommended Readings

Xerox handouts provided by instructor

## Purpose of the Course

To provide a solid foundation of the principles of character animation, with which the illusion of life is created. These principles can be applied to create any style of character animation, be it stylized cartoon characters, or realism, to blend seamlessly into live action films. Understanding these Foundation Principles is required in working with any other medium where the illusion of life is desired, e.g.; hand drawn animation, stop motion animation, cut-out animation, etc.

## Introduction to Maya Animation software

## Goals

- To understand use of Maya animation controls.
- To give the students hands on experience in the application of these principles.
- To develop a thorough understanding of the various applications of each principle.
- To give the student a comprehensive knowledge required for a professional environment.
- To provide a basis for more sophisticated and creative acting animation and filmmaking.

## Enabling Objectives

By the end of this course participants will be able to:

1. Express personality through weight and timing
2. Demonstrate the physics of follow-through
3. Demonstrate a character thinking and anticipating
4. Demonstrate a natural walk
5. Demonstrate a basic understanding of Maya animation controls.

## Course Outline, Emphasis, and Time Allocated

### 1. Introduction, Squash and Stretch and Timing (3 weeks)

Using squash and stretch to create the Illusion of Life.

Introduction to Maya animation controls

*Squash and Stretch assignment.*

### 2. Gesture: Staging and Exaggeration (1 week)

Examine the use of poses and silhouette in performance.

Clearly expressing emotion and attitude with a 3D character.

Introduction to biped movement

*Gesture Assignment*

### 3. Follow Through (2 weeks)

Understanding the fluid movement of hair and cloth.

*Follow Through Tail animation assignment.*

### 4. the Walk: and Arcs (2 weeks)

How to research for animation

How to breakdown a movement for clean key management.

*Walk assignment*

### 5 Character Walk (2weeks)

Adding personality to the walk.

*Character Walk Assignment*

### 6. Body Dynamics (2weeks)

Understanding the mechanics of natural movement, and effect of forces and weight.

*Push a heavy object up an incline Assignment*

### 7. Pose to Pose (3 weeks)

Acting for clarity of emotion.

*Pose to Pose Assignment*

### 8. Digital Editing (1 weeks)

Editing together all scenes for a demo reel.

*Editing assignment*

## General Requirements and Policies

Attendance will be expected and graded

### Grading Scale:

Class participation and attendance	30%
Weekly assignments	40%
Midterm and Final Demo Reel	30%

A: 90 -100%	Excellent
B: 80-89%	Good
C: 70-79%	Average
D: 60-69%	Poor
F: <60%	Did not meet minimum objectives

### Classroom Delivery / Methods and Time Allocations

Presentation and Demonstration: 90 min/week average

Assignment critique: 60 min/week average

### Description of Assignments, Projects, Papers

Projects will be individual assignments.

Scene assignments will be viewed by class with instructor critique,  
revisions will be requested and due the following class.

Mid-term will consist of Sketchbook and written quiz

Final will be the Demo reel; all assignments edited together

Scene assignments must be handed via internet blog,  
due 5pm the evening before class

### Summary of Course Requirements and Expectations

Attend all classes, be on time and participate in class discussions.

Read assignments before class as preparation for the next discussion.

Complete all class assignments and revisions on time and retain a copy.