

COURSE TITLE	CHARACTER ANIMATION
COURSE CODE	05MA0306
COURSE CREDITS	4

Objective:

- 1 Understand the principles of animation and their application to character movement.
- 2 Learn to animate believable character performances using Maya.
- 3 Develop timing, spacing, and posing for acting and physicality.
- 4 Apply body mechanics and emotion in character animation.
- 5 Create industry-ready animation sequences for film, TV, and games.

Course Outcomes: After completion of this course, student will be able to:

- 1 Students will demonstrate understanding of animation principles in character movement.
- 2 Students will animate walk, run, and jump cycles with proper timing and weight.
- 3 Students will create expressive character performances with emotional clarity.
- 4 Students will apply lip-sync techniques and facial animation.
- 5 Students will build a demo reel segment showcasing polished animation skills.

Pre-requisite of course: Basic understanding of keyframes, timeline, and Maya interface.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	8	0	0	0	50	50

Contents : Unit	Topics	Contact Hours
Total Hours		

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	Introduction to Character Animation Animation principles recap (squash & stretch, anticipation, etc.). Understanding Keyframes, Graph Editor, and Dope Sheet in Maya. Blocking Animation – Key poses, breakdowns, and timing charts. Animating a Bouncing Ball, Ball with Tail, and Ball with Personality.	30

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
2	Walk Cycle Contact, down, passing, and up positions. Run Cycle – Faster timing, weight shift, and stylized movement. Character Weight and Balance – Lifting, pushing, pulling exercises. Animating a Jump – Anticipation, takeoff, hang time, and landing.	30
3	Acting for Animation Contact, down, passing, and up positions. Run Cycle – Faster timing, weight shift, and stylized movement. Character Weight and Balance – Lifting, pushing, pulling exercises. Animating a Jump – Anticipation, takeoff, hang time, and landing.	30
4	Creature and Stylized Animation Creature and Stylized Animation – Quadruped and fantasy characters. Advanced Animation Polishing – Arc refinement, follow-through. Shot Continuity – Animating characters across scenes. Final Project – Fully animated scene with acting, dialogue, and movement	30
Total Hours		120

Textbook :

- 1 The Animator's Survival Kit, Richard Williams, Faber & Faber, 2001

References:

- 1 Acting for Animators, Acting for Animators, Ed Hooks, Routledge, 2009
- 2 Cartoon Animation, Cartoon Animation, Preston Blair, Walter Foster Publishing, 1994

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
10.00	15.00	25.00	25.00	25.00	0.00

Instructional Method:

- 1 Practical & Demo

Supplementary Resources:

- 1 <https://www.animationmentor.com/>
- 2 <https://11secondclub.com/>