

**Sacred Heart College (Autonomous)**

**Department of School of Communication**

**MA DIGITAL ANIMATION**

**Course plan**

**Academic Year: 2016 - 17**

**Semester II**

**COURSE I: 16P2DGAT02 HISTORY OF COMPUTER ANIMATION**

PROGRAMME	MA DIGITAL ANIMATION	SEMESTER	2
COURSE CODE AND TITLE	16P2DGAT02 History of Computer Animation	CREDIT	4
HOURS/WEEK	4	HOURS/SEM	72
FACULTY NAME	APARNA S K		

<b>COURSE OBJECTIVES</b>
To explain the history and aesthetics of computer animation, with references to related arts such as CGI, 3D animation movies & Visual effects.
To demonstrate a wide range of commercial and experimental works produced throughout the world.
To evaluate the aesthetics of wide range of animation movies.
To analyse issues and situations of different Animation studios in America
To analyse issues and situations of different Animation studios in Europe and Canada

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
<b>MODULE I</b>				
1	Introductory Session: Topic: General Ideas about animation, computer animation and the scope of animation.	PPT	video	
2	Movie Screening - Toy Story	PPT/Lecture	video	
3	Movie Screening - Toy Story	PPT/Lecture	video	
4	Movie Screening - Toy Story	PPT/Lecture	video	
5	History on the origin of Computer graphics - 1950's - 1960's	PPT/Lecture	video	
6	History on the origin of Computer graphics - 1970's - 1980's	PPT/Lecture	video	
7	History on the origin of Computer graphics - 1990's - 2000s	Lecture	video	
8	History on the origin of Computer graphics - 1990's - 2000s	Lecture	video	
9	Movie Screening - Toy Story II	Lecture	video	
10	Movie Screening - Toy Story II	Lecture	video	
11	Movie Screening - Toy Story II	PPT/Lecture	video	
12	History on the origin of Computer graphics - 2010s. The types of images :	PPT/Lecture	video	

	<ul style="list-style-type: none"> <li>• Two Dimensional</li> <li>• Pixel art</li> <li>• Sprite graphics</li> <li>• Vector graphics</li> <li>• Three-dimensional</li> </ul>			
13	Movie Screening - Chicken run I	PPT/Lecture	video	
14	Movie Screening - Chicken run I			
15	Movie Screening - Chicken run I			
16	Computer animation : Concepts and Principles	PPT/Lecture		
17	Pixar Shots	Lecture		
18	Pixar Shots	Lecture		
19	Important American Animation Studios	Lecture		
20	1 Hr Test	PPT/Lecture	Video & Movie screening	
21	Movie Screening - final Fantasy	PPT/Lecture	Video & Movie screening	
22	Movie Screening - final Fantasy	PPT/Lecture		
	Movie Screening - final Fantasy			
23	Movie Screening - Shrek I	PPT/Lecture	Video & Movie screening	
24	Movie Screening - Shrek I	Lecture		
25	Movie Screening - Shrek I	Lecture	Video & Movie screening	
26	European Animation Studios -	Lecture	Video & Movie screening	
27	European Animation Studios	Lecture	Video & Movie screening	
28	Movie Screening - The Chronicles of Narnia	Lecture		
29	Movie Screening - The Chronicles of Narnia	PPT/Lecture	Video & Movie screening	
30	Movie Screening - The Chronicles of Narnia	PPT/Lecture		
31	Movie Screening - Rise VFX Studio (Berlin) - Harry Potter	PPT/Lecture	Video & Movie screening	
32	Movie Screening - Rise VFX Studio (Berlin) - Harry Potter		Video & Movie screening	

33	Movie Screening - Rise Vfx Studio (Berlin) - Harry Potter	PPT/Lecture	Video & Movie screening	
34	Canadian Animation Studios : National Film Board of Canada	PPT/Lecture	Video & Movie screening	
35	Movie Screening - Ryan (2005 Oscar Winning)	PPT/Lecture		
36	Movie Screening - Ryan (2005 Oscar Winning)	Lecture		
	Movie Screening - Ryan (2005 Oscar Winning)			
37	The recording techniques and animation hardware	Lecture	Video & Movie screening	
38	The recording techniques and animation hardware	PPT/Lecture	Video & Movie screening	
39	The recording techniques and animation hardware	PPT/Lecture	Video & Movie screening	
40	New age of computer technology in the field of Animation - With movie reference	PPT/Lecture	Video & Movie screening	
41	Movie Screening - Tron (1982)	PPT/Lecture	Video & Movie screening	
42	Movie Screening - Tron (1982)	Lecture	Video & Movie screening	
43	Movie Screening - Tron (1982)	PPT/Lecture	Video & Movie screening	
44	Movie Screening - Star Wars	PPT/Lecture	Video & Movie screening	
45	Movie Screening - Star Wars	PPT/Lecture	Video & Movie screening	
46	Movie Screening - Star Wars	PPT/Lecture	Video & Movie screening	
47	Movie Screening - Ready Player 1	PPT/Lecture	Video & Movie screening	
48	Movie Screening - Ready Player 1	PPT/Lecture	Video & Movie screening	

49	Movie Screening - Ready Player 1	PPT/Lecture	Video & Movie screening	
50	Movie Screening - Avengers	PPT/Lecture	Video & Movie screening	
51	Movie Screening - Avengers	PPT/Lecture	Video & Movie screening	
52	Movie Screening - Avengers	PPT/Lecture	Video & Movie screening	
53	Movie Screening - Life of Pi	PPT/Lecture	Video & Movie screening	
54	Movie Screening - Life of Pi	PPT/Lecture	Video & Movie screening	
55	Movie Screening - Life of Pi		Video & Movie screening	
	Brief Revision of five Units			
56	Short Notes Preparations			
57	2 HOURS	<i>PPT/Lecture</i>	Video & Movie screening	
58	Short Research Paper Work On 2D Animation / 3D Animation - guidance and basic information	PPT/Lecture	Video & Movie screening	
59	Important American Animation Studios	PPT/Lecture	Video & Movie screening	
60	Important American Animation Studios	PPT/Lecture	Video & Movie screening	
61	Important American Animation Studios	PPT/Lecture	Video & Movie screening	
62	Important American Animation Studios	PPT/Lecture	Video & Movie screening	
63	Canadian Animation Studios : National Film Board of Canada	Lecture	Video & Movie screening	
64	Canadian Animation Studios : National Film Board of Canada	Lecture	Video & Movie screening	

65	Canadian Animation Studios : National Film Board of Canada	Lecture	Group discussion	
66	Canadian Animation Studios : National Film Board of Canada	Lecture	Group discussion	
67	European Animation Studios -	PPT/Lecture	Group discussion	
68	European Animation Studios -	PPT/Lecture	Group discussion	
69	European Animation Studios -	PPT/Lecture	Group discussion	
70	Revision			
71	Revision			
72	Revision			

### ASSIGNMENTS/SEMINAR – Details & Guidelines

	Date of Completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)
1.	10/12/2016	Origin of Computer graphics
2.	08/01/2017	Write movie review
3.	08/01/2017	Movie reviews
4.	28/01/2017	Computer animation by American animation studios
5.	13/02/2017	Pixar and DreamWorks
6.	01/03/2017	Computer animated feature films

### REFERENCE

1. Terrence Masson, CG 101: A Computer Graphics Industry Reference, New Riders Press; 1 edition (August 26, 1999)
2. Tom Sito, Moving Innovation: A History of Computer Animation, the MIT Press (August 21, 2015)
3. Christopher Finch, the CG Story: Computer-Generated Animation and Special Effects, the Monacelli Press (December 3, 2013)
4. Garth Gardner PhD, Computer Graphics and Animation: History, Careers, Expert Advice, Garth Gardner Company (July 2002)

## COURSE II: 16P2DGAP05 OBJECT ANIMATION & PIXILATION

PROGRAMME	M A DIGITAL ANIMATION	SEMESTER	2
COURSE CODE AND TITLE	16P2DGAP05 - OBJECT ANIMATION & PILXILATION	CREDIT	4
HOURS/WEEK	6	HOURS/SEM	72
FACULTY NAME	ABIN JOSE		

### COURSE OBJECTIVES

To demonstrate progress in basic sculpting, puppet making and animation skills
To analyze characteristics of well-designed and executed animation.
To identify the different use of materials, Image quality and size for productions.
To understand the industry as a whole by executing all components of development, pre-production, production and post-production planning
To demonstrate that they understand the post-production filmmaking process especially editing.

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
<b>MODULE I</b>				
1	Introduction and applications of Stop motion Animation	Lecture/ Interaction	PPT Workshop Screening	
2	History of Stop motion Art	Lecture/ Interaction	PPT Workshop Screening	
3	Introduction to Time-lapse Animation	Lecture/ Interaction	PPT Workshop Screening	
4	Screening examples of Time-lapse videos	Lecture/Practical	PPT Workshop Screening	
5	Techniques of Time-lapse Videos	Lecture/Practical	PPT Workshop Screening	
6	Techniques of Time-lapse Videos	Lecture/Practical	PPT Workshop Screening	

7	Short Concept Designing for Time-lapse. Cityscape time-lapse videos	Lecture/Practical	PPT Workshop Screening	
8	Short Concept Designing for Time-lapse. Environment based time-lapse videos	Lecture/Practical	PPT Workshop Screening	
9	Possibilities of Time-lapse Videos	Seminar	PPT / Presentation/ screening	
10	Advantages of time-lapse videos	Lecture/Practical	PPT Screening	
11	Time-lapse clip _Project	Practical	Workshop Screening	
12	Time-lapse clip _Project	Practical	Workshop Screening	
13	Time-lapse clip _Project Presentation	Presentation	PPT Workshop Screening	
<b>MODULE II</b>				
15	History of Stop Motion Photography	Lecture/Practical	PPT Workshop Screening	
16	Stop Motion Cameras	Lecture/Practical	PPT Workshop Screening	
17	Tripodes using in Stop Motion production	Lecture/Practical	PPT Workshop Screening	
18	Lighting techniques In Stop Motion Animation	Lecture/Practical	PPT Workshop Screening	
19	Lighting techniques In Stop Motion Animation	Lecture/Practical	PPT Workshop Screening	
20	Concept Developing and Story Making in Stop Motion		PPT Workshop Screening	
21	Making Script for the concept	Lecture/Practical	PPT Workshop Screening	
22	Storyboard Techniques	Lecture/Practical	PPT Workshop Screening	



23	Character designing methods	Lecture/Practical	PPT Workshop Screening	
<b>CIA-1</b>				
<b>MODULE III</b>				
27	Choosing materials for character development	Lecture/Practical	PPT Workshop Screening	
28	Props designing	Lecture/Practical	PPT Workshop Screening	
29	Set planing and set layout	Lecture/Practical	PPT Workshop Screening	
30	Production Lighting	Lecture/Practical	PPT Workshop Screening	
31	Production	Lecture/Practical	PPT Workshop Screening	
32	Post-production Techniques _software	Lecture/Practical	PPT Workshop Screening	
<b>MODULE 4</b>				
33	Introduction to Cut Out Animation	Lecture/Practical	PPT Workshop Screening	
34	Concept Development	Lecture/Practical	PPT Workshop Screening	
35	Character designing	Lecture/Practical	PPT Workshop Screening	
36	Background designing	Lecture/Practical	PPT Workshop Screening	
37	Choosing materials for characters & background	Lecture/Practical	PPT Workshop Screening	
38	Final layout	Lecture/Practical	PPT Workshop Screening	
39	Lighting	Lecture/Practical	PPT Workshop Screening	
40	Production	Lecture/Practical	PPT Workshop Screening	

41	Production	Lecture/Practical	PPT Workshop Screening	
42	Post production	Lecture/Practical	PPT Workshop Screening	
43	Screening	Lecture/Practical	PPT Workshop Screening	
<b>CIA 2</b>				
<b>MODULE 5</b>				
45	Introduction to pixilation Animation	Lecture/Practical	PPT Workshop Screening	
46	Concept Development	Lecture/Practical	PPT Workshop Screening	
47	Choosing Objects/characters	Lecture/Practical	PPT Workshop Screening	
48	Layout & Framing	Lecture/Practical	PPT Workshop Screening	
49	Production camera controls	Lecture/Practical	PPT Workshop Screening	
50	Production	Lecture/Practical	PPT Workshop Screening	
51	Production	Lecture/Practical	PPT Workshop Screening	
52	Post production / editing	Lecture/Practical	PPT Workshop Screening	
53	Sound mixing	Lecture/Practical	PPT Workshop Screening	
54	Final Presentation	Lecture/Practical	PPT Workshop Screening	
55	Introduction to Claymation Animation	Lecture/Practical	PPT Workshop Screening	
56	Claymation Project planning	Lecture/Practical	PPT Workshop Screening	

57	Production Pipeline methods	Lecture/Practical	PPT Workshop Screening	
58	Preproduction _ Concept Development	Lecture/Practical	PPT Workshop Screening	
59	Story Developing	Lecture/Practical	PPT Workshop Screening	
60	Storyboard Thumbnails	Lecture/Practical	PPT Workshop Screening	
61	Final storyboard	Lecture/Practical	PPT Workshop Screening	
62	Animation final layout presentation	Lecture/Practical	PPT Workshop Screening	
63	Character Design_ Concept art	Lecture/Practical	PPT Workshop Screening	
64	props designing _ Concept art	Lecture/Practical	PPT Workshop Screening	
65	Background Designing Concept art	Lecture/Practical	PPT Workshop Screening	
66	Armature/bone_ creation for character	Lecture/Practical	PPT Workshop Screening	
67	Wrapping and applying clay _ Characters	Lecture/Practical	PPT Workshop Screening	
68	Final detailing on characters / Background	Lecture/Practical	PPT Workshop Screening	
69	Production	Lecture/Practical	PPT Workshop Screening	
70	Production	Lecture/Practical	PPT Workshop Screening	
71	production	Lecture/Practical	PPT Workshop Screening	
72	Final Project Presentation	Lecture/Practical	PPT Workshop Screening	

### **INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines**

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc.)
1	14/12/2016	Pixilation Animation ( Individual )
2	10/01/2017	Time-lapse Animation

### **GROUP ASSIGNMENTS/ACTIVITIES – Details & Guidelines**

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc.)
1	02/02/2017	Presentation of Cut-out Animation
2	04/03/2017	Presentation of Final Claymation Animation Film

### **References**

- The Animation Book: Kit Laybourne
- The Encyclopedia of Animation Techniques: A Comprehensive Step-By-Step Directory of Techniques, with an Inspirational Gallery of Finished Works: Richard Taylor
- Stop Motion - Craft skills for model animation: Susannah Shaw
- Stop Motion Passion, Process and Performance: Barry J C Purves
- The Animator's Survival Kit: Richard Williams

**COURSE III: 16P2DGAP06 CG FOUNDATION I**

<b>PROGRAMME</b>	<b>MA DIGITAL ANIMATION</b>	<b>SEMESTER</b>	<b>2</b>
<b>COURSE CODE AND TITLE</b>	<b>16P2DGAP06 CG FOUNDATION</b>	<b>CREDIT</b>	<b>4</b>
<b>HOURS/WEEK</b>	<b>5</b>	<b>HOURS/SEM</b>	<b>72</b>
<b>FACULTY NAME</b>	<b>SIJO JOSEPH</b>		
<b>COURSE OBJECTIVES</b>			
To construct the specialization of digital Matte Painting foundation where they can perform their best.			
To develop precision, control and fluency within compositing work environments.			
To develop a vocabulary and visual language for CGI.			
To build an understanding of graphic design principles in applied practice.			
To classify Industry standard graphic- visual effects toolsets and plug-ins			

<b>Sl.No</b>	<b>Session</b>	<b>Topic</b>	<b>Method of Teaching</b>	<b>Value Additions</b>	<b>REMARKS</b>
1	1	INTRODUCTION TO DESIGNING	Lecture	Video Presentation	
2	1	INTRODUCTION TO VISUAL FX	Lecture	Video Presentation	
3	1	ADOBE PHOTOSHOP IN GENERAL	Lecture/Practical	Reading Materials	
4	2	INTERPHASE OF ADOBE PHOTOSHOP	Lecture/Practical	Reading Materials	
5	2	BASIC TRANSFORM TOOLS	Lecture/Practical	Reading Materials	
6	2	FILM FORMATS, FRAME RATE	Lecture/Practical	Reading Materials	
7	2	RASTER, VECTOR AND IMAGE RESOLUTION	Lecture/Practical	Reading Materials	
8	1	IMAGES IMPORT	Lecture/Practical	Reading Materials	
9	1	TEXT PRESETS	Lecture/Practical	Reading Materials	
10	3	TOOLBOX INTRODUCTION	Lecture/Practical	Video Presentation	

11	3	MENU BAR AND INTERPHASE SHORTCUTS	Lecture/Practical	Video Presentation	
12	1	TEXT TAB (CHARACTER TAB)	Lecture/Practical	Video Presentation	
13	1	TEXT FORMATS	Lecture/Practical	Video Presentation	
14	1	TITLE DESIGNING	Lecture/Practical	Video Presentation	
15	1	COLOR FILL	Lecture/Practical	Video Presentation	
16	2	GRADIENTS	Lecture/Practical	Video Presentation	
		<b>MODULE II</b>			
17	1	PAINT FX - BRUSHES & CLONE	Lecture/Practical	Video Presentation	
18	1	PAINT FX - CALLIGRAPHIC	Lecture/Practical	Video Presentation	
19	1	PAINT FX – FX PRESETS	Lecture/Practical	Video Presentation	
20	1	PAINT FX - CLONE, ART HISTORY	Lecture/Practical	Video Presentation	
21	1	PAINT FX - SPOT & PATCH TOOLS	Lecture/Practical	Video Presentation	
22	1	ASSIGNMENT/ WORKSHOP [PRE-PRODUCTION]	Practical	Video Presentation	
23	1	INTRODUCTION TO SELECTION PROCESS	Lecture/Practical	Video Presentation	
24	1	LASSO / POLYGONAL / MAGNETIC SELECTIONS	Lecture/Practical	Video Presentation	
25	1	MAGIC WAND / QUICK SELECTION	Lecture/Practical	Video Presentation	
26	1	SELECTION MODIFIERS	Lecture/Practical		
27	1	PEN TOOL INTRODUCTION	Lecture/Practical		
28	1	PEN TOOL SELECTION FOR ROTOSCOPE	Lecture/Practical	Reading Materials	
29	2	ADVANCED FEATURES OF PEN TOOL	Lecture/Practical	Video Presentation	
30	1	CIA I			
		<b>MODULE III</b>			
31	2	LAYER STYLES	Lecture/Practical	Video Presentation	
32	1	TITLE DESGNING WITH LAYER STYLES	Lecture/Practical		
33	1	LAYERS IN PHOTOSHOP	Lecture/Practical	Video Presentation	
34	1	LAYER PROPERTIES	Lecture/Practical		
35	1	MANAGING MULTIPLE LAYERS	Lecture/Practical	Reading Materials	

36	1	MATTE / ALPHA LAYERS	Lecture/Practical		
37	1	KEYING	Lecture/Practical		
38	2	MASK CHANNELS	Lecture/Practical	Video Presentation	
39	1	CHANNELS - ADVANCED	Lecture/Practical	Reading Materials	
40	1	COLOR RANGE	Lecture/Practical		
41	1	MATCH COLOR	Lecture/Practical		
42	1	EDGE TREATMENT IN SELECTION	Lecture/Practical		
43	1	SKY REPLACEMENT	Lecture/Practical		
44	1	DIGITAL SET EXTENSION	Lecture/Practical		
45	1	DIGITAL MATTE PAINTING - INTRODUCTION	Lecture/Practical	Video Presentation	
46	1	DIGITAL MATTE PAINTING - THE WORKFLOW	Lecture/Practical	Video Presentation	
47	1	DIGITAL MATTE PAINTING - ADVANCED STUDIES	Lecture/Practical	Reading Materials	
48	1	COLOR CORRECTION	Lecture/Practical		
49	1	ADVANCED COLOR CORRECTION 01	Lecture/Practical	Video Presentation	
50	1	ADVANCED COLOR CORRECTION 02	Lecture/Practical		
		<b>MODULE IV</b>			
51	1	PS FILTERS : LIQUIFY	Lecture/Practical	Video Presentation	
52	1	PS FILTERS : FILTER GALLERY	Lecture/Practical	Video Presentation	
53	1	PS FILTERS : VANISHING POINT	Lecture/Practical	Video Presentation	
54	1	PS FILTERS : LENSFLARE	Lecture/Practical	Video Presentation	
55	1	PS FILTERS : LIGHTING EFFECTS	Lecture/Practical	Video Presentation	
56	1	PS FILTERS : BLUR, SHARPEN & STYLIZE	Lecture/Practical	Video Presentation	
57		ASSIGNMENT REVIEW	Review		
58	1	ADVANCED SELECTION OPTIONS	Lecture/Practical		
59	1	LAYER MASK & VECTOR MASK	Lecture/Practical		
60	1	MERGING LAYERS & BIN ARRANGEMENT	Lecture/Practical		
61	1	COLOR GRADING 01 / LIGHTROOM	Lecture/Practical	WORKSHOP	
62	1	COLOR GRADING 02 / LIGHTROOM	Lecture/Practical	WORKSHOP	

63	1	IMPORT & EXPORT FORMATS	Lecture/Practical	Video Presentation	
64	1	MAGAZINE PROJECT DISCUSSION DAY 1	Lecture/Practical	Video Presentation	
65	1	MAGAZINE PROJECT DISCUSSION DAY 2	Lecture/Practical	Video Presentation	
		<b>MODULE V</b>			
66 - 67		REVISION	Practical		
68		DELIVERABLES	Practical		
69		COVERSIONS AND PROJECTIONS	Practical		
70		PORTFOLIO DEVELOPEMENT	Practical		
71		PORTFOLIO DEVELOPEMENT	Practical		
72		REVISION			

### ASSIGNMENTS AND SEMINARS

Sl No	Topic	Nature of Assignment
1	TEXT DESIGNING	Practical
2	FILM TITLE PROJECT	Practical
3	CREATING CARTOONIC CHARACTERS & SHAPES	Practical
4	BRUSH DESIGNS	Practical
5	LAYER DESIGNING	Practical
6	POSTER DESIGNING	Practical
7	IMAGE EDITING	Practical
8	IMAGE RETOUCHING	Practical
9	SKY REPLACEMENT OF LANDSCAPE	Practical
10	SET EXTENSION OF CITY SCAPE	Practical
11	SELECT OUT A BG FROM FOREGROUND	Practical
12	DIGITAL MATTE PAINTING	Practical
13	PHOTO RETOUCHING	Practical
14	MAGAZINE DESIGN	Practical

### REFERENCES

1	Adobe Photoshop Lightroom CC/6, Victoria Bampton
2	The Photoshop toolbox by Glyn Dewis
3	Digital Painting in Adobe Photoshop, Victoria Pavlov
4	Art as Experience, John Dewey
5	Adobe photoshop for photographers by Martin Evening



**COURSE IV: 16P2DGAP07 2D DIGITAL ANIMATION**

PROGRAMME	MA DIGITAL ANIMATION	SEMESTER	2
COURSE CODE	16P2DGAP07	CREDIT	4
COURSE TITLE	2D DIGITAL ANIMATION	HOURS/ SEM	72 HRS
FACULTY NAME	KISHORE KUMAR. P	HOURS/ WEEK	5

<b>COURSE OBJECTIVES</b>
To explain Basic Tools and Interface of the Digital Software
To create symbols
To create tween Animation And Masking
To create Gestures in Character Animation Digitally
To create Two & Four Legged Animation

SESSION	TOPIC	LEARNING RESOURCES	VALUE ADDITIONS	REMARKS
<b>UNIT - 1</b>				
1	Introduction	Lecture Practical	& Live Session	
2	Introduction	Lecture Practical	& Live Session	
3	Basic Tools	Lecture Practical	& Live Session	
4	Basic Tools	Lecture Practical	& Live Session	
5	Basic Tools	Lecture Practical	& Live Session	
6	Basic Tools	Lecture Practical	& Live Session	
7	Basic Tools	Lecture Practical	& Live Session	
8	Basic Tools	Lecture Practical	& Live Session	
9	Explain Time Line & Panles	Lecture Practical	& Live Session	
10	Explain Time Line & Panles	Lecture Practical	& Live Session	
<b>UNIT - 2</b>				
11	Symbols	Lecture Practical	& Live Session	
12	Symbols	Lecture Practical	& Live Session	
13	Symbols	Lecture Practical	& Live Session	
14	Symbols	Lecture Practical	& Live Session	
15	Symbols	Lecture Practical	& Live Session	

16	Symbols : Design Character and Expressions	Lecture Practical	&	Live Session	
17	Symbols : Design Character and Expressions	Lecture Practical	&	Live Session	
18	Symbols : Design Character and Expressions	Lecture Practical	&	Live Session	
19	Symbols : Design Character and Expressions	Lecture Practical	&	Live Session	
20	Symbols : Design Character and Expressions	Lecture Practical	&	Live Session	
21	Symbols : Design Character Head with full body	Lecture Practical	&	Live Session	
22	Symbols : Design Character Head with full body	Lecture Practical	&	Live Session	
23	Symbols : Design Character Head with full body	Lecture Practical	&	Live Session	
24	Tweening : Motion	Lecture Practical	&	Live Session	
25	Tweening : Motion	Lecture Practical	&	Live Session	
26	Tweening : Shape	Lecture Practical	&	Live Session	
27	Tweening : Shape	Lecture Practical	&	Live Session	
28	Tweening : Shape	Lecture Practical	&	Live Session	
29	Masking	Lecture Practical	&	Live Session	
30	Masking	Lecture Practical	&	Live Session	
	<b>FIRST CIA</b>	Lecture Practical	&	Live Session	
<b>UNIT - 3</b>					
31	Two Legged: Walk	Lecture Practical	&	Live Session	
32	Two Legged: Walk	Lecture Practical	&	Live Session	
33	Two Legged: Walk	Lecture Practical	&	Live Session	
34	Two Legged: Run	Lecture Practical	&	Live Session	

35	Two Legged: Run	Lecture Practical	&	Live Session	
36	Jump	Lecture Practical	&	Live Session	
37	Jump	Lecture Practical	&	Live Session	
38	Jump	Lecture Practical	&	Live Session	
39	Drop Jump	Lecture Practical	&	Live Session	
40	Drop Jump	Lecture Practical	&	Live Session	
41	Lip Sync	Lecture Practical	&	Live Session	
42	Lip Sync	Lecture Practical	&	Live Session	
43	Lip Sync	Lecture Practical	&	Live Session	
44	Four Legged Animal Anatomy	Lecture Practical	&	Live Session	
45	Four Legged Animal Anatomy	Lecture Practical	&	Live Session	
<b>UNIT - 4</b>					
46	ZOO STUDY	Field Visit Study		Live Session	
47	ZOO STUDY	Field Visit Study		Live Session	
48	ZOO STUDY	Field Visit Study		Live Session	
49	ZOO STUDY	Field Visit Study		Live Session	
50	ZOO STUDY	Field Visit Study		Live Session	
51	Four Legged Animal : Designing	Lecture Practical	&	Live Session	
52	Four Legged Animal : Designing	Lecture Practical	&	Live Session	
53	Four Legged Animal : Designing	Lecture Practical	&	Live Session	
54	Four Legged Animal : Designing	Lecture Practical	&	Live Session	
55	Four Legged Animal : Designing	Lecture Practical	&	Live Session	
<b>CIA 2</b>					
<b>UNIT - 5</b>					
56	Study of Animal Gestures from 2D Film	Lecture Practical	&	Live Session	
57	Study of Animal Gestures from 2D Film	Lecture Practical	&	Live Session	

58	Study of Animal Gestures from 2D Film	Lecture Practical	&	Live Session	
59	Animal Skelton Pivot Study	Lecture Practical	&	Live Session	
60	Animal Skelton Pivot Study	Lecture Practical	&	Live Session	
61	Four Legged Animal Walk	Lecture Practical	&	Live Session	
62	Four Legged Animal Walk	Lecture Practical	&	Live Session	
63	Four Legged Animal Walk	Lecture Practical	&	Live Session	
64	Four Legged Animal Walk	Lecture Practical	&	Live Session	
65	Four Legged Animal Walk	Lecture Practical	&	Live Session	
66	Four legged animal Run	Lecture Practical	&	Live Session	
67	Four legged animal Run	Lecture Practical	&	Live Session	
68	Four legged animal Run	Lecture Practical	&	Live Session	
69	Four legged animal Run	Lecture Practical	&	Live Session	
70	Four legged animal Run	Lecture Practical	&	Live Session	

<b>Date of completion</b>	<b>Topic of Assignment &amp; Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc)</b>
10/12/2016	Jump , Drop Jump
13/01/2017	Lip Sync
27/01/2017	Two Legged : Walk
13/02/2017	Two Legged : Run
25/02/2017	Four Legged : Walk
03/03/2017	Four Legged : Run

#### REFERENCES

Barry Kelly, Tim Jones, David Wolfe, Allan Rosson, Foundation Flash Cartoon Animation, Apress; 2007 edition (November 28, 2007)

Chris Jackson, Flash Cinematic Techniques: Enhancing Animated Shorts and Interactive Storytelling , Focal Press; 1 edition (January 25, 2010)

Preston Blair , Cartoon Animation (Collector's Series) Walter Foster Publishing (1 January 1994)

Richard Williams , Animator's Survival kit, Faber; Main - Revised Edition(5 November 2009)

**COURSE V: 16P2DGAP08 3D DESIGN**

PROGRAMME	M A DIGITAL ANIMATION	SEMESTER	2
COURSE CODE AND TITLE	16P2DGAP08 -3D DESIGN	CREDIT	4
HOURS/WEEK	6	HOURS/SEM	72
FACULTY NAME	ABIN JOSE		

<b>COURSE OBJECTIVES</b>
To demonstrate progress in basic 3D modeling, texturing , and lighting skills
To analyze characteristics of well-designed and executed 3D designs.
To identify the different use of materials, Image quality and size for productions.
To understand the industry as a whole by executing all components of development, pre-production, production and post-production planning
To demonstrate that they understand the 3d production process especially Modeling.

<b>SESSION</b>	<b>TOPIC</b>	<b>LEARNING RESOURCES</b>	<b>VALUE ADDITIONS</b>	<b>REMARKS</b>
<b>MODULE I</b>				
1	Introduction and applications of 3D	Lecture/ Interaction	PPT Workshop Screening	
2	Scopes and applications of 3d Animation	Lecture/ Interaction	PPT Workshop Screening	
3	3D Production Pipeline	Lecture/ Interaction	PPT Workshop Screening	
4	Types of 3D Software's , File Types Using in 3D Animation	Lecture/Practical	PPT Workshop Screening	
5	Screening Of Pixar Short animated Films	Lecture/Practical	PPT Workshop Screening	

6	Screening Of Christmas Carol Full animated movie	Lecture/Practical	PPT Workshop Screening	
7	Maya interface_ Panels	Lecture/Practical	PPT Workshop Screening	
8	Orthogonal views	Lecture/Practical	PPT Workshop Screening	
9	Basic navigation tools	Seminar	PPT / Presentation/ screening	
10	Move, scale, Rotation	Lecture/Practical	PPT Screening	
11	Introduction to Polygons	Practical	Workshop Screening	
12	polygon editing_ vertex, face, edge	Practical	Workshop Screening	
13	Booleans	Presentation	PPT Workshop Screening	
<b>MODULE II</b>				
15	Extrude	Lecture/Practical	PPT Workshop Screening	
16	Insert edge loop tool , muly cut tool	Lecture/Practical	PPT Workshop Screening	
17	merge tool , smooth	Lecture/Practical	PPT Workshop Screening	
18	Interior modeling_ Kitchen	Lecture/Practical	PPT Workshop Screening	
19	Modeling a house	Lecture/Practical	PPT Workshop Screening	
20	Modeling Guns , barrels , Swords other props		PPT Workshop Screening	
21	Bicycle	Lecture/Practical	PPT Workshop Screening	
22	Blue Print Setting For Advanced Modeling	Lecture/Practical	PPT Workshop Screening	
23	Modeling Lamborghini , Pickup Truck	Lecture/Practical	PPT Workshop Screening	

CIA-1				
MODULE III				
27	Introduction to Character Modeling _Alien	Lecture/Practical	PPT Workshop Screening	
28	Alien Modeling	Lecture/Practical	PPT Workshop Screening	
29	Realistic Human character modeling	Lecture/Practical	PPT Workshop Screening	
30	Realistic Human character modeling	Lecture/Practical	PPT Workshop Screening	
31	Introduction to texturing	Lecture/Practical	PPT Workshop Screening	
32	2D , 3D Textures	Lecture/Practical	PPT Workshop Screening	
MODULE IV				
33	Materials and shaders	Lecture/Practical	PPT Workshop Screening	
34	Planar Mapping	Lecture/Practical	PPT Workshop Screening	
35	Cylindrical mapping	Lecture/Practical	PPT Workshop Screening	
36	Spherical mapping	Lecture/Practical	PPT Workshop Screening	
37	Automatic mapping, U V Unwrapping	Lecture/Practical	PPT Workshop Screening	
38	U V Editing, Sewing, Binding	Lecture/Practical	PPT Workshop Screening	
39	Advanced Texturing	Lecture/Practical	PPT Workshop Screening	
40	Interior Texturing	Lecture/Practical	PPT Workshop Screening	
41	Props, Weapons Texturing	Lecture/Practical	PPT Workshop Screening	

42	Texturing A building.	Lecture/Practical	PPT Workshop Screening	
43	Landscape Texturing	Lecture/Practical	PPT Workshop Screening	
<b>CIA 2</b>				
<b>MODULE V</b>				
45	Introduction to Lighting In MAYA	Lecture/Practical	PPT Workshop Screening	
46	Basic Lights _specialities & Properties	Lecture/Practical	PPT Workshop Screening	
47	Shadows in lighting	Lecture/Practical	PPT Workshop Screening	
48	Light linking	Lecture/Practical	PPT Workshop Screening	
49	3 Point Lighting	Lecture/Practical	PPT Workshop Screening	
50	Interior Lighting In Maya	Lecture/Practical	PPT Workshop Screening	
51	Exterior Lighting In Maya	Lecture/Practical	PPT Workshop Screening	
52	Image Based Lighting In Maya	Lecture/Practical	PPT Workshop Screening	
53	Physical Sunlight In Maya	Lecture/Practical	PPT Workshop Screening	
54	Creature Modeling _Dragon geometry	Lecture/Practical	PPT Workshop Screening	
55	Creature Modeling _Dragon Body	Lecture/Practical	PPT Workshop Screening	
56	Creature Modeling _Dragon legs	Lecture/Practical	PPT Workshop Screening	
57	Creature Modeling _Dragon Tail	Lecture/Practical	PPT Workshop Screening	



58	Creature Modeling _Dragon nails	Lecture/Practical	PPT Workshop Screening	
59	Creature Modeling _Dragon body Detailing	Lecture/Practical	PPT Workshop Screening	
60	Creature Modeling _Dragonhead	Lecture/Practical	PPT Workshop Screening	
61	Creature Modeling _Dragonhead detail	Lecture/Practical	PPT Workshop Screening	
62	Final model _Unwrapping & Texturing	Lecture/Practical	PPT Workshop Screening	
63	Dragon _Final output	Lecture/Practical	PPT Workshop Screening	
64	Alien Modeling	Lecture/Practical	PPT Workshop Screening	
65	Image plane setting	Lecture/Practical	PPT Workshop Screening	
66	basic body mesh creation	Lecture/Practical	PPT Workshop Screening	
67	basic body mesh creation	Lecture/Practical	PPT Workshop Screening	
68	detailing body parts	Lecture/Practical	PPT Workshop Screening	
69	Alien Head Modeling	Lecture/Practical	PPT Workshop Screening	
70	Alien Head Modeling	Lecture/Practical	PPT Workshop Screening	
71	Character Compositing _all body parts	Lecture/Practical	PPT Workshop Screening	
72	final output	Lecture/Practical	PPT Workshop Screening	

### **INDIVIDUAL ASSIGNMENTS/SEMINAR – Details & Guidelines**

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc.)
1	4/12/2016	Kitchen 3D Model
2	28/12/2016	Cottage 3D Model

### **GROUP ASSIGNMENTS/ACTIVITIES – Details & Guidelines**

	Date of completion	Topic of Assignment & Nature of assignment (Individual/Group – Written/Presentation – Graded or Non-graded etc.)
1	22/01/2017	Dragon Advanced 3d Model
2	16/02/2017	Alian Advanced 3d model

### **References**

- Mastering Maya 2009
- Autodesk Knowledge
- The Animator's Survival Kit: Richard Williams