ALAGAPPA UNIVERSITY

(A State University Established in 1985)

Karaikudi - 630003. Tamil Nadu, India

2017 Accredited with A+ Grade by NAAC (CGPA : 3.64)

2018 Graded as Category - I Granted Autonomy

2018 Swachh Campus Rank : 4

2021 nirf Rank : 33

2021 QS UNIVERSITY RANKINGS Asia Rank : 199

FACULTY OF EDUCATION

ALAGAPPA UNIVERSITY COLLEGE OF EDUCATION

DIPLOMA IN ANIMATION

REGULATIONS AND SYLLABUS

(For the candidates admitted from the Academic Year 2022 - 2023)

ALAGAPPA UNIVERSITY COLLEGE OFEDUCATION

DIPLOMA IN ANIMATION-DA

REGULATIONS AND SYLLABUS

[For the candidates admitted from the AcademicYear2022–2023 onwards]

ALAGAPPAUNIVERSITY

(A State University Accredited with "A+" grade by NAAC (CGPA:3.64) inthe Third Cycle and Graded as Category-I University by MHRD-UGC)

Karaikudi-630003,TamilNadu.

THE PANEL OF MEMBERS-BROAD BASED BOARD OF STUDIES

Convener: Dr. J. E. Merlin Sasikala, Principal i/c, College of Education Teaching experience: 20 years, Research Experience: 15, Area of Research: Educational Psychology , Teacher Education and Educational Technology	
Foreign Subject Expert: Prof. Vinnaras Nithyanantham, Professor Education and Languages, Department of General Education, Lebanese French University, Iraq. Teaching experience: 17 years,Research Experience: 17,	
Subject Expert: Dr. I. Muthuchamy**,** Professor and Head, Department of Educational Technology**,** Bharathidasan University Tiruchirapalli. Teaching experience: 26 years, Research Experience: 26, Area of Research: Educational Technology and Education Psychology.	
Subject Expert: Dr. K. Chellamani Ph.D., Dean – Faculty of Education, Department of Education, Pondichery University, Pondichery. Teaching experience: 25 years, Research Experience: 26 , Area of Research: Educational Psychology, Research Design andMethods, Pedagogy of technology	
Subject Expert for Diploma in Cognitive Science Programme: Dr. A. Jahitha Begum, Professor and Head, Department of Education Gandhigram Rural Institute, Dindigul. Teaching experience: 16 years, Research Experience: 10, Area of Research: Cognitive Science, Communicative Competence	
Industry Expert: Mr. S. Rajapandian, Headmaster, AlagappaModel Higher Sec. School, Karaikudi. Teaching Experience: 25 years, Research Experience: 8 years, Area of Research: Chemical Science and Educational Psychology.	
Special Invitee: Prof. P. Sivakumar, Professor & Head, Department of Education (DDE), Alagappa University, Karaikudi. Teaching experience: 33 years, Research Experience:26, Area of Research: Education Technology, Education Psychology and CurriculumDevelopment	
Special invitee for Diploma in Cognitive Science Programme: Dr. J. Sujathamalini, Professor & Head, Dean of Education, Department of Special Education and RehabilitationScience Alagappa University, Karaikudi. Teaching experience: 20 years, Research Experience:15, Area of Research: Educational Psychology and Special Education and Education	

Student Alumni: Dr. AR. Saravanakumar, Assistant Professor & Head i/c, Department of History, Alagappa University, Karaikudi. Teaching experience: 25 years, Research Experience: 15, Area of Research: Teaching Strategies, Education Psychology and Special Education	
Ex-Officio Member: Dr. V. Sivakumar, Director, Curriculum Development Cell, Alagappa University, Karaikudi-03. Teaching experience: 20 years, Research Experience: 11, Area of Research: Marketing Management, Agricultural Marketing, International Logistics, Retail Logistics, Consumer Research	
Member: Dr. C. Anbuchelvan, Assistant Professor in Commerce College of Education, Teaching experience: 15 years, Research Experience: 10, Area of Research: Educational Psychology and technology.	
Member: Dr. A. Pio Albina, Assistant Professor in Mathematics, College of Education, Teaching experience: 13 years, research Experience: 11, Area of Research: Mathematics Education and Education technology	
Member: Dr. M. Parimala Fathima, Assistant Professor, in Physical Science, College of Education, Teaching experience: 18 years, research Experience: 18, Area of Research: Cognitive Science Education and Teaching competency.	
Member: Dr. M. Suganthi, Assistant Professor in Tamil, College of Education, Teaching experience: 18 years, research Experience: 15, Area of Research: Teaching of Tamil, Psychology, Sociology.	
Member: Dr. R. Portia, Assistant Professor in Education, College of Education, Teaching experience: 16 years, research Experience: 16, Area of Research: Educational Psychology, Guidance and Counselling.	
Member: Dr. J. Jayachithra, Assistant Professor in Education, College of Education, Teaching experience: 13 years, research Experience: 12, Area of Research: Life skills, Psychology.	
Member: Dr. M. Sanmuga Revathi, Assistant Professor in Education, College of Education, Teaching experience: 13 years, research Experience: 7, Area of Research: Bio cognition, meta cognition.	
Member: Dr. G. Sivakumar, Assistant Professor in Education, College of Education, Teaching experience: 15 years, research Experience: 9, Area of Research:Primary Education	

Member: Dr. G. Rajeswari, Assistant Professor in Biological Science, College of Education, Teaching experience: 13 years, research Experience: 12, Area of Research: Life skills, Psychology, Biological Science	
Member: Mr. I. Lenin, Assistant Professor in Education, College of Education, Teaching experience: 6 years, research Experience: 4, Area of Research: Social Emotional Learning	
Member: Dr. A. Rube Jesintha, Assistant Professor in Physical Education, College of Education, Teaching experience: 06 years, Research Experience: 12, Area of Research: Physical and yoga Education.	
Member: Mrs. EMN. Sharmila, Arts & Crafts Instructor, College of Education, Teaching experience: 8 years, research Experience: 04, Area of Research: Arts and crafts and computer applications	

ALAGAPPA UNIVERSITYCOLLEGE OFEDUCATION

Karaikudi -630003, Tamil Nadu.

REGULATIONS AND SYLLABUS-(CBCS)

[For the candidates admitted from the Academic Year 2022 – 2023 onwards]

Name of the Department : **Alagappa University College of Education**
Programme of Level : **DIPLOMA IN ANIMATION**
Duration for the Programme : Full Time (6 months)

DIPLOMA IN ANIMATION

Introduction:

The field of Animation is a great career choice for those individuals who have an aptitude in the area of illustration, cartoons, and 3D modeling. A diploma in Animation/Multimedia course is meant for those individuals who want to harness their creativity and imagination in the rapidly growing animation industry. A diploma in Animation teaches the styles and techniques of animation for creating video games, making illustrations, developing storyboards, editing videos, graphic designing, and developing motion pictures. A diploma in Multimedia teaches the students the fine concepts of 3D, 4D, Visual Effects, and Graphic designing.

Programme Objectives:

- Multimedia and animation have seen a growing market and the career opportunities of the professionals who have completed the Diploma course.
- Multimedia professionals can work as video and Graphic design specialists who design alluring websites by using pictures, typography, and illustrations to create a more engaging user interface.
- Digital media specialists can help in digital marketing campaigns by creating effective strategies forassisting digital media managers.
- A diploma in Multimedia course is also important for artists working on the multimedia platform to create alluring visual effects for video games, TV, films, and other modes of media.

1. Programme Specific Objectives-(PSO)

PSO-1	To develop a good command of the subject matter of theanimating
PSO-2	To develop different skills of developing Multimedia
PSO-3	To develop proper altitudes towards animation as a result of which they will be able to maximize the achievements in 2 D animations
PSO-4	To develop the styles and techniques of animation for creating video games, making illustrations, developing storyboards, editing videos, graphic designing, and developing motion pictures with respect to 3D animations

2. Programme Outcome-(PO)

After successful completion of the diploma program, the following programmeoutcomes will be achieved by the pre-service teachers.

Po1	Pre-service teachers acquire fundamental knowledge and skills inanimation to use effective teaching strategies and create instructional materials that support student learning.
Po2	Pre-service teachers gain knowledge on developing multimedia toevolve the concept mapping with educational content
Po3	Acquire communication skills and apply *the ability to convey information and ideas effectively* inside the classroom, among peers, parents, society and administrators.
Po4	Familiarize the ability in developing multimedia
Po5	Familiarize to become technological competence and realize the significance of ICT in animation process. In addition they are able to apply ICT tools, techniques, in formal and non-formal settings of classroom.
Po6	Acquire knowledge, skills needed for effective multimedia andcope up with classroom problems with respect to 3D animations
Po7	Assess and apply the skills of animationfor total quality management.
Po8	Create and implement the concepts and basic principles of Creative animation inmultimedia.
Po9	Implement the sound techniques of Creative multimedia.
Po10	Teach the fine concepts of 3D, 4D, Visual Effects, and Graphic designing.

3. Programme Specific Outcome-(PSO)

After successful completion of the program the following programme specificoutcomes will be achieved by the pre-service teachers

PSO1	Students will know the various pedagogic skills and approaches ofAnimation
PSO2	Students develop proper attitude towards Multimedia as result ofwhich he will be able to maximize the achievements from both the material and human resources
PSO3	Students gain relevant knowledge, skills, and values, involved in developing Multimedia.
PSO4	Students apply practical concepts in their practical work
PSO5	students know their potential and progress in different skills in Animation.

Eligibility for Admission:

Applicants must have qualified any UG degree. The reisnoupperage limit getting admission.

Attendance:

The minimum attendance of students shal lhave to be 80%for the programme.

Asessment / Evaluation:

The performance of a student in each course evaluated in terms of percentage of marks with a provision for conversion to grade points. Evaluation for each course shall be done by a continuous internal assessment by the concerned course teacher by internal assessments and consolidated at the end of the course along with the external assessment.

Continuous Internal Evaluation for Theory Courses:

The internal assessment marks fortheorycoursesareabout25markseach, shall be based on attendance, tests, seminars and assignments.

a.Test(average of best of two tests)	10
b.Assignment	05
c.seminar/Discussion	05
d.Attendance	05
	Total=25

Scheme/Pattern of External Examination (Question Paper Pattern) **ofTheory Subjects**

Theory - Maximum 75 Marks

End-Semester Examinations shall normally be conducted at the end of each semester. There shall be one end-semester examination of 3 hours duration in each theory course. The question papers of end-semester examinations of theory subjects shall be able to perform achievement testing of the students in an effective manner. The question paper shall be prepared in accordance with the following guidelines.

A question paper may contain very short answer type, short answer type questions and essay type questions. Different types of questions shall have different weightage to quantify their range. The pattern of questions for theory subjects shall be as follows:

Section A	10 questions. All questions carry equal marks. (Objective type questions)	10 × 1 = 10 Marks	10 questions – 2each from everyunit
Section B	5 questions Either / or type like 1.a (or) b. All questions carry equal marks and each answer should not exceed one pageor 250 words.	5 × 5 = 25	5 questions – 1 each from every unit
Section C	5 questions Either / or type like 1.a (or) b. All questions carry equal marks	5 × 8 = 40	5 questions – 1 each from every unit

CURRICULUM FRAME WORK FOR DIPLOMA IN ANIMATION

Course structure

S.No.	Course Code	Title of the Paper	T/P	Cr.	Hrs./ Wee k	Max. Marks		
						Int.	Ext.	Total
1	727101	Fundamental of Animation	T	4	5	25	75	100
2	727102	Principles Of Multimedia	T	4	5	25	75	100
3	727103	2D Animation	P	5	10	25	75	100
4	727104	3D Animation	P	5	10	25	75	100
		Total		**18**	**30**	**100**	**300**	**400**

Core	Coursecode 727101	FUNDAMENTAL OF ANIMATION	T	Credits: 4	Hours: 5

UNIT - I		
Objective 1	To, understand the concept of Animation	
What is mean by Animation – Why we need Animation – History of Animation– Uses of Animation – Types of Animation – Principles of Animation – SomeTechniques of Animation – Animation on the WEB – 3D Animation – Special Effects –Creating Animation.		
Outcome 1	Relate the concept of Animation & Special Effects.	**K2**
UNIT - II		
Objective 2	To familiaze the concepts of Flash Animation	
Creating Animation in Flash: Introduction to Flash Animation – Introduction to Flash – Working with the Timeline and Frame-based Animation - Working with theTimeline and Tween- based Animation – Understanding Layers - Actionscript.		
Outcome 2	Realize the concepts of creating Animation in Flash.	**K3**
UNIT - III		
Objective 3	**To educate 3D Animation and its applications.**	
3D Animation & its Concepts – Types of 3D Animation – Skeleton & Kinetic 3D Animation – Texturing & Lighting of 3D Animation – 3D Camera Tracking – Applications & Software of 3D Animation.		
Outcome 3	Learners understand the concept of **application and software of 3D Animation**	**K2**
UNIT - IV		
Objective 4	To make them understand Script Animation and their usage.	
Motion Caption – Formats – Methods – Usages – Expression – Motion Capture Software's – Script Animation Usage – Different Language of Script Animation Among the Software.		
Outcome 4	Learners analyze the principles of Script Animation.	**K3**
UNIT - V		
Objective 5	To educate the concept of Story development in video.	
Concept Development –Story Developing –Audio & Video – Color Model –Device Independent Color Model – Gamma and Gamma Correction - Production Budgets- 3D Animated Movies.		
Outcome 5	Learners discuses the story development	**K2**

Suggested Readings :-

Akilli, M., & Seven, S. (2014). The effects of 3d computer models to academic achievement and spatial ability: Atomic models. Turkish Journal of Education, 3(1), 11-23.

Arici, N. & Dalkilic, E. (2006). The contribution of animations to computer assisted education:an application sample. Kastamonu Education Journal, 14(2), 421-430.

Arslan, H. O., Cigdemoglu, C., & Moseley, C. (2012). A three-tier diagnostic test to assess preservice teachers' misconceptions about global warming, greenhouse effect, ozone layer depletion, and acid rain. International Journal of Science Education, 34(11), 1667- 1686.

Ates, S., & Polat, M. (2005). The effects of learning cycle method on removing misconceptions related to electric circuits. Hacettepe University Journal of Education, 28, 39-47.

Bernhard, J. (2000). Do active engagement curricula give long-lived conceptualunderstanding? Physics Teacher Education Beyond, 749-752.

Baki, A., Kosa, T., & Guven, B. (2011). A comparative study of the effects of dynamic geometry software and physical manipulatives on pre-service mathematics teachers' spatial visualization skills. British Journal of Educational Technology, 42(2), 291–310.

Bulbul, O. (2009). Simulations and animations effects in computer assisted instruction on academic success and retention when teaching of optic unit in physics (Unpublished master's thesis). Cukurova University, Adana, Turkey.

Online Resources

https://www.britannica.com/art/painting/Elements-of-design

https://www.britannica.com/art/painting/Elements-of-design

http://ecoursesonline.iasri.res.in/mod/page/view.php?id=120905

K1-Remember	*K2-Understand*	*K3-Apply*	*K4-Analyze*	*K5-Evaluate*	*K6-Create*

Course Designed by: Dr. P. Student Sibi

COURSE OUTCOMES VS PROGRAMME OUTCOMES

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO 1	L (1)	L (1)	L (1)	S (1)	L (1)	M (2)	M (1)	S(3)	M(2)	-
CO 2	M (2)	M (2)	M (2)	M (2)	L (1)	M (2)	M(2)	S(1)	L (1)	-
CO 3	L(1)	S (3)	S (3)	M (2)	M (2)	S(3)	M(2)	M(2)	M (2)	L (1)
CO 4	S (3)	S (3)	M (2)	M (2)	M (2)	S(3)	S(3)	M(2)	M (2)	L (1)
CO 5	L (1)	M (2)	M (2)	S (3)	L(1)	L(1)	S(3)	S(3)	L (1)	L (1)
W.AV.	**1.6**	**2.2**	**2**	**2**	**1.4**	**2.2**	**2.2**	**2.2**	**1.6**	**0.4**

S – Strong (3) M – Medium (2), L - Low (1)

COURSE OUTCOMES VS PROGRAMME SPECIFIC OUTCOMES

CO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	L(1)	L(1)	S(3)	L(1)	M(2)
CO 2	M (2)	S(3)	M(2)	S(3)	M(2)
CO 3	M(2)	S(3)	S(3)	M(2)	L (1)
CO 4	M(2)	M(2)	M(2)	S(3)	M(2)
CO 5	M(2)	S(3)	S(3)	M(2)	M(2)
W.AV.	**1.8**	**2.4**	**2.6**	**2.2**	**1.8**

S – Strong (3) M – Medium (2), L - Low (1)

II-SEMESTER					
Core-2	**Course code 727102**	**PRINCIPLES OF MULTIMEDIA**	**T**	**Credits: 4**	**Hours: 5**

UNIT - I

Objective 1	To, understand the concept of Multimedia and their characteristics.	

INTRODUCTION

Introduction to Multimedia – Characteristics of Multimedia Presentation – Multimedia Components – Promotion of Multimedia Based Components – Digital Representation – Media and Data Streams – Multimedia Architecture – Multimediab Documents – Visual Display System.

Outcome 1	Learner understand the concept of Multimedia and their components.	**K2**

UNIT - II

Objective 2	To familiaze the concepts of elements of Multimedia.	

ELEMENTS OFMULTIMEDIA

Text: Types, Font, Unicode Standard, Text Compression, File Formats – Image: Types, Image Processing, Standards, Specification, Device Independent Color Models, Gamma Correction, File Formats – Video: Video Signal Transmission, Signal Formats, Broadcasting Standards, Digital Video Standards, PC Video, Video File Formats – Audio: Acoustics, Characteristics of Sound – Elements of Audio System: Microphone, Amplifier, Loudspeaker, Audio Mixer, Digital Audio, MIDI – Graphics: Components of Graphics System, Co-ordinate System, Plotter – Introduction to 2D and 3D Graphics – Surface Characteristics and Texture, Illumination Models – Animation: Key Frames and Tweening Techniques – 2D and 3D Animation

Outcome 2	Realize the concepts of various elements of Multimedia.	**K3**

UNIT - III

Objective 3	**To educate the types and Te chniques of Multimedia system.**	

MULTIMEDIA SYSTEMS

Compression Types and Techniques: CODEC, GIF Coding Standards, JPEG, MPEG – Multimedia Database System – User Interfaces – OS Multimedia Support – Hardware Support – Real Time Protocols – Play Back Architectures – Synchronization – Document Architecture – Hypermedia Concepts: Hypermedia Design – Digital Copyrights.

Outcome 3	Learners understand the concept of **various techniques of Multimedia System.**	**K2**

UNIT - IV

Objective 4	To make them understand different Multimedia Tools.	

MULTIMEDIA TOOLS

Authoring Tools – Features and Types – Card and Page Based Tools – Icon and Object Based Tools – Time Based Tools – Cross Platform Authoring Tools – Editing Tools – Painting and Drawing Tools – 3D Modeling and Animation Tools – Image Editing Tools – Sound Editing Tools – Digital Movie Tools.

Outcome 4	Learners analyze the principles of usage of Multimedia Tools.	**K3**

UNIT - V		
Objective 5	To educate the concept of script writing in Multimedia.	
MULTIMEDIA APPLICATION DEVELOPMENT Software Life Cycle – ADDIE Model – Conceptualization – Content Collection – Story Board–Script – Authoring Metaphors – Testing – Report Writing – Documentation.		
Outcome 5	Learners discuses the application of Multimedia in Education.	**K2**

Suggested Readings :-

Büyüköztürk, G. (2014). Data analysis Booklet for Social Sciences: Statistics, Research Design and SPSSPractices. 20th press. Ankara: Pegem Academia.Chua, Y. P. (2006). Methods and Statistics: Elementary Statistics Research. Kuala Lumpur: McGrawHill.

Clark, R. C., & Mayer, R. E. (2016). E-learning and the science of instruction: Proven guidelines forconsumers and designers of multimedia learning. New Jersey: John Wiley & Sons.

Clark, L. A. & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. Psychological Assessment, 7, 309-319.

Cohen, L., Manion, L., & Morrison, K. (2007). Research Methods in Education. New York: Routledge,Taylor &Francis Group.Creswell, J. W. (2003). Research design: Qualitative, quantitative and mixed approaches. 2nd ed., LosAngeles: Sage Publication

Online Resources

https://www.britannica.com/art/painting/Elements-of-design

https://www.britannica.com/art/painting/Elements-of-design

http://ecoursesonline.iasri.res.in/mod/page/view.php?id=120905

K1-Knowledge	*K2-Understanding*	*K3-Apply*	*K4-Analyze*	*K5-Evaluate*	*K6-Create*

Course Designed by: Dr. P. Studert Sibi

Course Outcome VS Programme Outcomes

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L(1)	L(1)	L(1)	L(1)	L(1)	M(2)	L(1)	-	-	-
CO2	M(2)	M(2)	M(2)	M(2)	L(1)	S (3)	-	L(1)	L(1)	L(1)
CO3	S (3)	S (3)	S (3)	M(2)	M(2)	S (3)	L(1)	L(1)	M(2)	L(1)
CO4	S (3)	S (3)	M(2)	M(2)	M(2)	S (3)	L(1)	L(1)	M(2)	L(1)
CO5	L(1)	M(2)	M(2)	S (3)	S(3)	S (3)	-	-	L(1)	L(1)
W.AV	**2**	**2.2**	**2**	**2**	**1.8**	**2.8**	**0.6**	**0.6**	**1.2**	**0.8**

S–Strong(3),M-Medium(2),L-Low(1)

Course Outcome VS Programme Specific Outcomes

CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	M (2)	L (1)	L (1)	L (1)	L (1)
CO2	S (3)	M (2)	M (2)	M (2)	L (1)
CO3	S (3)	S (3)	S (3)	M (2)	L (1)
CO4	S (3)	S (3)	M (2)	M (2)	L (1)
CO5	S (3)	M (2)	M (2)	M (2)	M (2)
W.AV	**2.8**	**2.2**	**2**	**1.8**	**1.2**

S–Strong(3),M-Medium(2),L-Low(1)

Core	Coursecode 727103	2D ANIMATION	P	Credits: 5	Hours: 10

UNIT - I

Objective 1	To, understand the concept of 2D Animation	
WORKSPACE AND TOOLS Introduction to 2D Animation – Workspace – Panels – Timeline – Content and Stage – Understanding Strokes and Fills – Creating and Editing Shapes, Curves and Text – Gradient Fills – Aligning and Distributing Objects – Creating Symbols and Instances.		
Outcome 1	Learner understand the concept of 2D Animation	**K2**

UNIT - II

Objective 2	To familiaze the concepts of various animating symbols	
ANIMATION: BASICS Motion Tweening – Motion Editor – Adding Motion Eases – Animating Symbols: Position, Pacing & Timing, Transparency, Filters, Transformations, Motion Path, Swapping Targets, Nested Animation, Frame-by-Frame Animation.		
Outcome 2	Realize the concepts of animating symbols.	**K3**

UNIT - III

Objective 3	**To educate the advanced form of animation.**	
ANIMATION: ADVANCED Character Animation: Making and Animating Deformations, Lip-Syncing Dialogue – Animating Camera Moves – Shapes and Masks: Shape Tweening, Shape Hints, Masked Layer Animation – Animating Color.		
Outcome 3	Learners understand the concept of **advanced form of animation.**	**K2**

UNIT - IV

Objective 4	To make them understand the Virtual Reality	
INTERACTIVITY AND VR Creating Buttons and Animated Buttons Action Script and JavaScript – Virtual Reality: VR 360 Documents, Interactivity, Camera Position, Graphics, Animation.		
Outcome 4	Learners analyze the principles of Virtual Reality.	**K3**

UNIT - V

Objective 5	To educate the concept of working with video and audio	
WORKING WITH AUDIO AND VIDEO Using Sounds – Importing Video – Encoding Option in Media Encoder – Publishing in HTML 5, Desktop Applications and Mobile Devices. Challenges in Creating Animations for Responsive Designs.		
Outcome 5	Learners discuses the application of animation in Education.	**K2**

Suggested Readings :-

Russell Chun. (2018). Adobe Animate CC Classroom in a Book (1st. ed.). Pearson Education.
Gack Davidson. (2017). Adobe Animate CC 2017: The Complete Beginner's Guide. Van Helostein Publication

Online Resources https://www.britannica.com/art/painting/Elements-of-design https://www.britannica.com/art/painting/Elements-of-design http://ecoursesonline.iasri.res.in/mod/page/view.php?id=120905					
K1-Knowledge	***K2-Understanding***	***K3-Apply***	***K4-Analyze***	***K5-Evaluate***	***K6-Create***
Course Designed by: Dr. P. Studert Sibi					

COURSE OUTCOMES VS PROGRAMME OUTCOMES

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO 1	L (1)	L (1)	L (1)	L (1)	L (1)	M (2)	L (1)	-	-	-
CO 2	M (2)	M (2)	M (2)	M (2)	L (1)	S (3)	-	L (1)	L (1)	L (1)
CO 3	S (3)	S (3)	S (3)	M (2)	M (2)	S (3)	L (1)	L (1)	M (2)	L (1)
CO 4	S (3)	S (3)	M (2)	M (2)	M (2)	S (3)	L (1)	L (1)	M (2)	L (1)
CO 5	L (1)	M (2)	M (2)	S (3)	S (3)	S (3)	-	-	L (1)	L (1)
W.AV.	**2**	**2.2**	**2**	**2**	**1.8**	**2.8**	**0.6**	**0.6**	**1.2**	**0.8**

S – Strong (3)M – Medium (2), L - Low (1)

COURSE OUTCOMES VS PROGRAMME SPECIFIC OUTCOMES

CO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	M (2)	L (1)	L (1)	L (1)	L (1)
CO 2	S (3)	M (2)	M (2)	M (2)	L (1)
CO 3	S (3)	S (3)	S (3)	M (2)	L (1)
CO 4	S (3)	S (3)	M (2)	M (2)	L (1)
CO 5	S (3)	M (2)	M (2)	M (2)	M (2)
W.AV.	**2.8**	**2.2**	**2**	**1.8**	**1.2**

S – Strong (3) M – Medium (2), L - Low (1)

Core	Coursecode: 727104	3D ANIMATION	P	Credits: 5	Hours: 10

UNIT - I

Objective 1	To, understand the concept of 3D Animation	
MODELLING Creating geometric forms utilizing points, vectors and polygons and curves. Discussing the application of Open GL and how pixels, light and RGB colors are displayed on a computer screen. Manipulating objects quickly in perspective, top, side and front views simultaneously		
Outcome 1	Learner understand the concept of utilization of 3D Animation	**K2**

UNIT - II

Objective 2	To familiaze the concepts of creating texture map.	
TEXTURING Introduction to texturing, working with Diffuse, Opacity and Reflection, Basics of UV unwrapping, Creating texture maps, Bump and Displacement Mapping, Introduction to Video post, Introduction to standard lights.		
Outcome 2	Realize the concepts of texturing	**K3**

UNIT - III

Objective 3	**To educate the advanced form of animation.**	
ANIMATION Animation Principles and Process, Basic Animation with types of Balls. Working with Animation Editor and Tools. Key frame Animation, Nonlinear Animation, Path Animation.		
Outcome 3	Learners understand the concept of **advanced form of animation.**	**K2**

UNIT - IV

Objective 4	To make them understand the foundation of good facial expression and voice recording.	
FACIAL EXPRESSION AND LIP SYNC Foundation of good facial expression, expression chart and voice recording, how to create lip-synch, subtle facial expressions to suit the personality of the character and the accent style of the pre-recorded dialogue.		
Outcome 4	Learners analyze the principles of voice recording.	**K3**

UNIT - V

Objective 5	To educate the concept of advanced form of modeling.	
LIGHTING AND RENDERING Working with Advanced Modelling and Light Tracing with Radiosity, Using Atmospheric and Render Effects.Retracing and mental ray effects with Batch and Network Rendering.		
Outcome 5	Learners discuses the application of animation in Education.	**K2**

Suggested Readings :-

Ko, C.B. A brief review of facial emotion recognition based on visual information. Sensors 2018, 18, 401.

Li, H.; Sun, J.; Xu, Z.; Chen, L. Multimodal 2D + 3D facial expression recognition with deep fusion convolutional neural network. IEEE Trans. Multimed. 2017, 19, 2816– 2831.

Bejaoui, H.; Ghazouani, H.; Barhoumi, W. Fully automated facial expression recognition using 3D morphable model and mesh-local binary pattern. In Proceedings of the International Conference on Advanced Conceptsfor Intelligent Vision Systems (ACIVIS), Antwerp, Belgium, 18–21 September 2017; Springer: Cham, Switzerland, 2017; pp. 39–50.

Mishra, B.; Fernandes, S.L.; Abhishek, K.; Alva, A.; Shetty, C.; Ajila, C.V.; Shetty, D.; Rao, H.; Shetty, P. Facial

expression recognition using feature based techniques and model based techniques: A survey. In Proceedingsof the 2015 2nd International Conference on Electronics and Communication Systems (ICECS), Coimbatore, India, 26–27 February 2015; pp. 589–594.

Danelakis, A.; Theoharis, T.; Pratikakis, I. A survey on facial expression recognition in3D video sequences. Multimed. Tools Appl. 2015, 74, 5577–5615.

Online Resources

https://www.britannica.com/art/painting/Elements-of-design

https://www.britannica.com/art/painting/Elements-of-design

http://ecoursesonline.iasri.res.in/mod/page/view.php?id=120905

K1-Remember	***K2-Understand***	***K3-Apply***	***K4-Analyze***	***K5-Evaluate***	***K6-Create***

Course Designed by: Dr. J. Kumar

COURSE OUTCOMES VS PROGRAMME OUTCOMES

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO 1	L (1)	L (1)	L (1)	L (1)	L (1)	M (2)	L (1)	-	-	-
CO 2	M (2)	M (2)	M (2)	M (2)	L (1)	S (3)	-	L (1)	L (1)	L (1)
CO 3	S (3)	S (3)	S (3)	M (2)	M (2)	S (3)	L (1)	L (1)	M (2)	L (1)
CO 4	S (3)	S (3)	M (2)	M (2)	M (2)	S (3)	L (1)	L (1)	M (2)	L (1)
CO 5	L (1)	M (2)	M (2)	S (3)	S (3)	S (3)	-	-	L (1)	L (1)
W.AV.	**2**	**2.2**	**2**	**2**	**1.8**	**2.8**	**0.6**	**0.6**	**1.2**	**0.8**

S – Strong (3)M – Medium (2), L - Low (1)

COURSE OUTCOMES VS PROGRAMME SPECIFIC OUTCOMES

CO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	M (2)	L (1)	L (1)	L (1)	L (1)
CO 2	S (3)	M (2)	M (2)	M (2)	L (1)
CO 3	S (3)	S (3)	S (3)	M (2)	L (1)
CO 4	S (3)	S (3)	M (2)	M (2)	L (1)
CO 5	S (3)	M (2)	M (2)	M (2)	M (2)
W.AV.	**2.8**	**2.2**	**2**	**1.8**	**1.2**

S – Strong (3) M – Medium (2), L - Low (1)

EDUCATION CAMPUS