SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

An Autonomous Institution

T.V.R. NAGAR, ARUPPUKOTTAI ROAD, MADURAI-22

Program Outcomes, Program Specific Outcomes & Course Outcomes

B.Sc. Animation

BATCH: 2017 -2020

Department of Animation

Programme Code : AN1003

B.Sc. Animation

Programme Code   :   AN1003

ACADEMIC YEAR   2017-2018

(BATCH 2017-2020)

Programme Outcomes (PO)

The Programme Outcomes of the B.Sc. Animation degree are

- To PROVIDE a world class curriculum and the industry-based instruction in digital arts and computer animation.

- To PRODUCE globally competitive graduates with excellent in animation skills and expertise in computer graphics and movie production process

- To PROMOTE the growth and development of the animation industry in the southern part of the country especially in Tamil Nadu. This has been the cultural hub of the south India

- To PROPUP the rich and traditional arts like painting, drawing and sculpting to the young generation.

Programme Specific Outcomes (PSO)

The Programme Specific Outcomes of the B.Sc.Animation degree are

The college encourages and the curriculum is decided in a way which promotes Creative Arts Entrepreneurship which helps students to develop an understanding of business processes, basic business principles, self-promotion, sales techniques, portfolio preparation, financial techniques and legal issues. These are tailored specifically for students planning to work in creative fields such as the Storyboard and Concept Artist

- Character Designer
- Web Designer
- Layout and Matte Painting Artist
- 3D Character / Set Modeler
- Texturing and Lighting Artist
- Rigger
- 2D and 3D Animator
- Production Co-coordinator
- Art Director
- Editor
- Technical Director
- Script Writer
- Setup Artist
- Graphic Designer
- Creative Director
- Compositor
- Visualiser
- Architectural Designer
- 2D & 3D Game Designer

Course Outcomes (CO)
SEMESTER– I

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17AN103	**Course Name**	: Graphics Design-Theory
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Involve actively in participative learning of Graphic Design.

CO2   Create designs of professional standards.

CO3   Develop and demonstrate their understanding and skillful use of the elements and principles of visual design.

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17AN104	**Course Name**	:Graphics Design – Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Build upon the concepts introduced in Graphic Design and successfully meet the challenges of Graphic Design

CO2   Complete exploratory projects in design theory and practice, which may be used to develop a presentation portfolio of personal work.

CO3   Develop an understanding of the language of design.

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17AN105	**Course Name**	:Digital Art and Design – Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III(Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Familiarize the various approaches, methods and techniques of Animation Technology.

CO2   Master traditional & digital tools to produce stills and moving images.

CO3   Develop an understanding of the language of design, which includes critical theory, critique, history, technology, and craftsmanship.

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17AN106	**Course Name**	:Drawing Concepts – Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Allied)	**Credits**	: 4

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Develop life-drawing techniques and explore specifically the concept of Visual Perception as applied in visual communication.

CO2   Explore specifically the concepts of grouping and hierarchy as applied in visual communication.

CO3   Explore specifically the concept of Gestalt Theory as applied in visual communication.

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17AN107	**Course Name**	:Pre-Production –Theory
Internal Marks	: 100	**External Marks**	: -
Part	: IV(Skill Based)	**Credits**	: 1

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Apply the knowledge of character development, storytelling, acting and timing.

CO2 Understand the production process of 2D animation skill and 3D animation/modeling.

CO3 Develop a character in an animated film or design a model in 3D environment.

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17AN108	**Course Name**	:Pre-Production- Practical
Internal Marks	: 100	**External Marks**	: -
Part	: IV(Skill Based)	**Credits**	: 1

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Apply the knowledge of character development, storytelling, acting and timing.

CO2 Understand the production process of 2D animation skill and 3D animation/modeling.

CO3 Develop a character in an animated film or design a model in 3D environment.

I B.Sc. Animation

Semester : I   **Batch** : 2017-2020

Course Code :17AN109   **Course Name** :Intro to PC skills and Programming-Theory

Internal Marks : 100   **External Marks** : -

Part : IV(Skill Based)   **Credits** : 1

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Identify computer hardware and peripheral devices.

CO2 Familiarize the software applications and understand the file management

CO3 Explore the Web to conduct research and identify the computer risks and safety

I B.Sc. Animation

Semester : I   **Batch** : 2017-2020

Course Code :17AN110   **Course Name** :Intro to PC skills and Programming-Practical

Internal Marks : 100   **External Marks** : -

Part : IV(Skill Based)   **Credits** : 1

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Apply the applications of computers.

CO2 Understand the use of computers and technology throughout their high school, college, and future careers.

CO3 Analyze the activities that explore social and ethical issues related to computers.

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17VE107	**Course Name**	:Value Education
Internal Marks	: 50	**External Marks**	: 50
Part	: IV	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Know the social values, ethics which have to be reflected in one's behavior

CO2 Get the opportunities for the continuous development of their knowledge, skills and attitudes related to certain values.

I B.Sc. Animation

Semester	: I	**Batch**	: 2017-2020
Course Code	:17PE108	**Course Name**	:Physical Education
Internal Marks	: 100	**External Marks**	: -
Part	: V	**Credits**	: 1

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Know the importance of physical fitness through the exercises.

CO2 Develop the organic systems of the body.

CO3   Incorporate a healthy eating lifestyle and physical activity into daily life.

Course Outcomes (CO)
SEMESTER– II

I B.Sc. Animation

Semester	: II	**Batch**	: 2017-2020
Course Code	:17AN203	**Course Name**	:Principles of Animation, Media Laws & Ethics-Theory
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 4

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Impart the social and cultural aspects of mass media and understand the world of Electronic Media

CO2 Understand the values that link the global needs with the local needs.

CO3 Focus on mass media and electronic media on recent advances in the fast changing field of Media Comprehend Production process, techniques, resource requirements & follow up.

I B.Sc. Animation

Semester	: II	**Batch**	: 2017-2020
Course Code	:17AN204	**Course Name**	:Cartoon Animation -Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Familiarize with the various approaches, methods and techniques of Animation Technology.

CO2 Develop competencies and skills for becoming an effective Animator.

CO3 Utilize traditional & digital tools to produce stills and moving images.

CO4 Apply laws of human motion and psychology in 2-D characters.

I B.Sc. Animation

Semester	**: II**	**Batch**	**: 2017-2020**
Course Code	**:17AN205**	**Course Name**	:Web Design – Practical
Internal Marks	**: 25**	**External Marks**	**: 75**
Part	**: III (Core)**	**Credits**	**: 3**

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Understand the various visualization of imagery techniques and fundamentals of Graphics in various aspects of drawings.

CO2 Explain fundamentals of typography and understand the scope and application in contemporary society.

CO3 Understand functional aspects of print advertising and design page layout for magazine and brochures.

I B.Sc. Animation

Semester	**: II**	**Batch**	**: 2017-2020**
Course Code	**:17AN206**	**Course Name**	:Anatomy for Animation – Practical
Internal Marks	**: 25**	**External Marks**	**: 75**
Part	**: III (Allied)**	**Credits**	**: 2**

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Understand the anatomy of drawing human figure

CO2 Demonstrate improved figure drawing skills

CO3 Use shading in drawing

I B.Sc. Animation

Semester	: II	**Batch**	: 2017-2020
Course Code	:17AN207	**Course Name**	:Cel Animation -Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Allied)	**Credits**	:

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand the Classical animation and techniques using the light box method and do the animation frame by frame for a sequence.

CO2   Apply the flip book animation methods, understanding the frames per second and other technical aspects of classical animation.

I B.Sc. Animation

Semester	: II	**Batch**	: 2017-2020
Course Code	:17ES207	**Course Name**	:Environmental Studies
Internal Marks	: 50	**External Marks**	: 50
Part	: IV	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Know and Practice the importance of environmental education

Course Outcomes (CO)
SEMESTER – III

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-2020
Course Code	:17AN301	**Course Name**	:Introduction to 3D Studio Max -Theory
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Understand all the major features of 3D studio Max, its tools and interface: modeling, animation, texture, lighting, rendering, expressions, rigging, dynamics, and popular workflow.

CO2 Demonstrate the usage of 3D studio Max.

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-2020
Course Code	:17AN303	**Course Name**	:Animate CC 2D Animation - Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Handle the advanced 2d animation using digital system in developing movements of animals, aquatic creatures, birds and insects**.**

CO2 Apply the animation facial expression with 2d characters.

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-2020
Course Code	:17AN304	**Course Name**	:Industrial Design in Max - Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Understand the architectural spaces

CO2 Demonstrate modeling techniques in a real time game character and environments

CO3 Demonstrate techniques for building, texturing, and lighting a environment or a set to function in real time.

CO4 Develop architectural environments and characters for animation.

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-2020
Course Code	:17AN305	**Course Name**	:Texturing, Lighting& Rendering in Max – Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 4

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Understand the different types of tactile, visual textures, Materials and shaders.

CO2 Demonstrate the reaction of lights with different materials and also shows the ability to wrap the texture to the given object properly.

CO3 Develop an understanding of rendering techniques and applications.

CO4 Develop the understanding of composition through lighting, camera and color.

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-2020
Course Code	:17AN306	**Course Name**	:Gaming Techniques- Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Allied)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand the basic principles and components of computer gaming functions

CO2   Apply simple game and optimize.

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-2020
Course Code	:17AN302	**Course Name**	:Videography - Theory
Internal Marks	: 25	**External Marks**	: 75
Part	: III(Allied)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand artistic and aesthetic principles of video production, technical aspects and investigation of video production.

CO2   Apply the concepts of Adobe Premiere Pro.

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-20120
Course Code	:17AN307	**Course Name**	:Videography – Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Allied)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Understand the basic knowledge of Video Camera

CO2 Apply the concepts of Outdoor Lighting

CO3 Experiment the knowledge of Microphone and its features

II B.Sc. Animation

Semester	: III	**Batch**	: 2017-2020
Course Code	:17AN309	**Course Name**	:Film Appreciation (NME)
Internal Marks	: 25	**External Marks**	: 75
Part	: IV (NME)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Analyze films, acting for films and acting for animated films

CO2 Demonstrate knowledge of the historical and technological development of film as an art form and a cultural product.

II B.Sc. Animation

Semester	**: III**	**Batch**	**: 2017-2020**
Course Code	**:17AN308**	**Course Name**	**:**Project in 3D Studio Max - Practical
Internal Marks	**: 100**	**External Marks**	**: -**
Part	**: IV (Skill Based)**	**Credits**	**: 2**

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Animate virtual environments with 3ds Max, 3D model objects, rig a character, realistic physics in Mass-FX and animated projects in mental ray.

CO2   Create 3D projects for film, broadcast, and games with 3ds Max

CO3 Build and animate entire 3D worlds with 3ds Max.

Course Outcomes (CO)
SEMESTER – IV

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN401	**Course Name**	:Introduction to Maya -Theory
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand the major features of Maya, its tools and interface: modeling, animation, texture, lighting, rendering, expressions, rigging, dynamics and popular workflow.

CO2   Demonstrate the usage of Maya.

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN402	**Course Name**	:3D Modeling in Maya -Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Describe architectural spaces; demonstrate modeling techniques in a real time game character and environments

CO2   Demonstrate techniques for building, texturing, and lighting the environment or a set to function in real time.

CO3   Develop architectural environments and characters for animation.

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN403	**Course Name**	:Shading and Texturing in Maya – Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand visual concepts, development and application for creating works with computer graphics tools.

CO2   Understand the different types of tactile and visual textures, Materials and shaders.

CO3   Demonstrate the reaction of lights with different materials and also shows the ability to wrap the texture to the given object properly.

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN404	**Course Name**	:Character Rigging in Maya -Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Allied)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Apply the Animation process concerning the characters featured in an animated production.

CO2   Apply the research, designing, animating and rigging virtual characters by using Maya 3D technologies.

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN405	**Course Name**	:Camera & Lighting techniques in Maya- Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Allied)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand the methodology for lighting design.

CO2   Understand rendering techniques and applications.

CO3   Understanding of composition through lighting, camera, and color.

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN406	**Course Name**	:Mel Scripting- Theory
Internal Marks	: 100	**External Marks**	: -
Part	: IV (Skill Based)	**Credits**	: 4

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Apply the intellectual skills necessary to apply these skills to creative problem solving.

CO2   Apply the scripting in addition to a working knowledge of the syntax and concepts behind writing production tools and animation techniques.

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN407	**Course Name**	:Project in Maya - Practical
Internal Marks	: 100	**External Marks**	: -
Part	: IV (Skill Based)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Develop a project by using functional and transferable skills of modeling, texturing, animation, lighting and camera techniques.

II B.Sc. Animation

Semester	: IV	**Batch**	: 2017-2020
Course Code	:17AN408	**Course Name**	:Basic Techniques of Animation
Internal Marks	: 50	**External Marks**	: 50
Part	: IV (NME)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand the fundamental principles and basic techniques of 2D animation

CO2   Demonstrate the principles of animation.

Course Outcomes (CO)
SEMESTER – V

III B.Sc. Animation

Semester	: V	**Batch**	: 2017-2020
Course Code	:17AN502	**Course Name**	:Maya Dynamics -Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 5

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Apply computer generated dynamics and particle effects in real-time simulations.

CO2   Simulate gravity, particle effects, and turbulence, advanced dynamic motion, collision, motion of particles, objects, fluidics, and their interactions. Simulate rigid body dynamics, constraints and optimizing.

CO3   Interpret 2D and 3D asset imaging and its special effects.

III B.Sc. Animation

Semester	: V	**Batch**	: 2017-2020
Course Code	:17AN501	**Course Name**	:Video Editing Basics -Theory
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand the theory and application of editing techniques using the Avid Editing System.

CO2   Apply the editing process, digitizing, and editing of scenes.

III B.Sc. Animation

Semester	: V	**Batch**	: 2017-2020
Course Code	:17AN503	**Course Name**	:Non Linear Editing – (Avid) – Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understand the evolution of video and film editing theory and technology.

CO2   Identify the components and procedures of the edit room workflow and recognize the basic techniques applied to the edit decision making process.

CO3   Operate typical non linear edit room computer and peripheral hardware and software.

III B.Sc. Animation

Semester	: V	**Batch**	: 2017-2020
Course Code	:17AN504	**Course Name**	:Compositing - Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Understanding the fundamental issues, technologies and techniques involved in postproduction work

CO2   Apply the complexities of integrating computer generated images and animations with real footage.

CO3   Apply the knowledge to undertake core compositing work.

III B.Sc. Animation

Semester	: V	**Batch**	: 2017-2020
Course Code	:17AN505	**Course Name**	:3D Animation -Practical
Internal Marks	: 25	**External Marks**	: 75
Part	: III (Core)	**Credits**	: 4

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Familiarize with various approaches, methods and techniques of Animation Technology.

CO2 Develop competencies and skills needed for becoming an effective Animator.

CO3 Apply the traditional & digital tools to produce stills and moving images and training in applying laws of human motion and psychology in 3-D characters.

III B.Sc. Animation

Semester	: V	**Batch**	: 2017-2020
Course Code	:17AN506	**Course Name**	:Creating Demo Reel –Practical
Internal Marks	: 100	**External Marks**	: -
Part	: IV (Skill Based)	**Credits**	: 3

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Prepare the students to develop his presentation

III B.Sc. Animation

Semester	: V	**Batch**	: 2017-2020
Course Code	:17AN507	**Course Name**	:Film Appreciation and Analysis
Internal Marks	: 100	**External Marks**	: -
Part	: IV (Skill Based)	**Credits**	: 2

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1   Analyze films, acting for films and acting for animated films.

CO2   Demonstrate the knowledge of historical and technological development of film as an art form and a cultural product.

CO3   Apply the knowledge of filmmaking as a craft and a collaborative process.

Course Outcomes (CO)
SEMESTER – VI

III B.Sc. Animation

Semester	**: VI**	**Batch**	**: 2017-2020**
Course Code	**:17AN601**	**Course Name**	**:**Internship or Project
Internal Marks	**: 100**	**External Marks**	**: -**
Part	**: III (Core)**	**Credits**	**: 30**

Course Outcomes:

On Successful Completion of the Course students will be able to

CO1 Introduce the students to a working environment,

CO2 Provide the experience of a real time production process

CO3 Make the student to experience the production pipeline of the internship / project which is included in the 6th semester.