

MEDIA (CODE NO. 821)

JOB ROLE: ANIMATOR (QUALIFICATION PACK: Ref Id. MES/Q0701) SESSION 2020-2021 CLASS XI

1. Introduction

An Animator is an artist who creates multiple images, which when displayed in rapid sequence give an illusion of movement called animation. An Animator needs to refer to the concept of artwork prepared by animation artists to produce a sequence of 2D or 3D images by producing multiple images called frames, which when sequenced together rapidly create an illusion of movement. The images can be made up of digital or hand-drawn pictures, models or puppets. An Animator has the responsibilities of developing animation as per client requirement and work with editors to composite the various layers of animation.

2. Course Objectives

1. Apply effective oral and written communication skills to interact with people and customers;
2. Identify the principal components of a computer system;
3. Demonstrate the basic skills of using computer;
4. Demonstrate self-management skills;
5. Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities;
6. Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;
7. Demonstrate the knowledge of uses and applications of Animation;
8. Demonstrate the knowledge of principles of Animation
9. Demonstrate the knowledge of basics compositing
10. Demonstrate the knowledge of various features of 2D Animation
11. Demonstrate the knowledge of the concept of 3D production pipeline
12. Demonstrate the concept of bouncing balls and various other steps of animation
13. Demonstrate the knowledge of project setting and animation rendering

3. Curriculum

This course is a planned sequence of instructions consisting of Units meant for developing employability and Skills competencies of students of Class XI opting for Skills subject along with general education subjects.

Theory	60 marks
Practical	40 marks
Total Marks	100 marks

The unit-wise distribution of periods and marks for Class XI is as follows:

CLASS XI (SESSION 2020-2021)				
	Units	No. of Periods for Theory and Practical 260		Max. Marks for Theory and Practical 100
Part A	Employability Skills			
	Unit 1: Communication Skills – III	10		10
	Unit 2: Self-management Skills – III	10		
	Unit 3: Information and Communication Technology Skills – III	10		
	Unit 4: Entrepreneurial Skills – III	15		
	Unit 5: Green Skills – III	05		
	Total	50		
Part B	Skills	Theory	Practical	
	Unit 1: Introduction to Animation	20	20	50
	Unit 2: Principles of Animation	20	20	
	Unit 3: Introduction to 2D Animation	60	70	
	Total	100	110	60
Part C	Practical Work			
	Practical Examination			15
	Written Test			10
	Viva Voce			05
	Total			30
Part D	Project Work/Field Visit			
	Practical File/Student Portfolio			10
	Total			10
	Grand Total			100

4. CONTENTS

CLASS XI (SESSION 2020-2021)

PART A: EMPLOYABILITY SKILLS

	Units
1.	Communication Skills -III
2.	Self-management Skills- III
3.	Information and Communication Technology Skills- III
4.	Entrepreneurial Skills -III
5.	Green Skills -III
	Detailed curriculum of Employability Skills is available separately

PART B: SKILLS

	Units
1.	Introduction to Animation
2.	Principles of Animation
3.	Introduction to 2D Animation

UNIT 1: INTRODUCTION TO ANIMATION		
Learning Outcome	Theory	Practical
1. Describe the history of animation	<ol style="list-style-type: none"> 1. Evolution of animation, with examples 2. History of animation 	<ol style="list-style-type: none"> 1. Visit to a Studio to understand the animation industry and its evolution 2. Demonstration of the use of animation
2. Identify various traditional methods of animation	<ol style="list-style-type: none"> 1. Various traditional methods of animation (e.g. hand drawn animation) 	<ol style="list-style-type: none"> 1. Identification of traditional methods of animation 2. Demonstrate the knowledge of hand drawn animation and Claymation (animation using clay)
3. Identify modern methods of Animation – e.g. Stop Motion Animation	<ol style="list-style-type: none"> 1. Methods of animation – modern animation and traditional animation 2. Meaning of Stop Motion Animation 	<ol style="list-style-type: none"> 1. Differentiation of modern animation and traditional animation 2. Demonstration of the procedure adopted for Stop Motion Animation
4. Identify the various elements involved process of computer Animation (2D and 3D Animation)	<ol style="list-style-type: none"> 1. Concepts of computer animation 2. Advantages of computer animation (2D Animation using Adobe Flash and for 3D Animation using Autodesk MAYA) over traditional animation methods 	<ol style="list-style-type: none"> 1. Differentiation of 2D and 3D animation 2. Demonstration of Digital animation approaches (frame by frame, shape and motion tweening) 3. Identification of pivot point locations of nodes, groups and other 3D animation
5. Demonstrate the knowledge of production pipeline	<ol style="list-style-type: none"> 1. Concept of production pipeline 	<ol style="list-style-type: none"> 1. Demonstration of steps involved in the animation production pipeline
6. Describe the process of preproduction and story-boarding	<ol style="list-style-type: none"> 1. Concepts of pre-production and story-boarding activities 	<ol style="list-style-type: none"> 1. Explanation of preproduction activities 2. Development of a short storyboard

UNIT 2: PRINCIPLES OF ANIMATION		
Learning Outcome	Theory	Practical
1. Identify the principles of animation	1. Twelve principles on which animation is established: <ul style="list-style-type: none"> • Squash and Stretch • Exaggeration • Anticipation • Ease in and Out • Arcs • Overlapping Action and Follow-through • Pose to Pose and Straight-Ahead Animation • Reference and Planning • Timing • Staging • Appeal • Personality 2. Application of each of the above mentioned principles	1. Demonstration of the twelve basic principles of animation 2. Enlisting the advantages and limitations of different animation techniques 3. Demonstration of the uses of a combination of these 2,3 or 4 principles to get the necessary feel and action in a shot and scene

UNIT 3: INTRODUCTION TO 2D ANIMATION		
Learning Outcome	Theory	Practical
1. Demonstration the concept of 2D Animation using Adobe Flash	1. Basics of 2D animation 2. Concept of production, preproduction and post-production	1. Demonstration of making of storyboard image 2. Demonstration of the phases pre-production, production and post-production
2. Demonstration different types of 2D Animation using Adobe Flash	1. Path animation and stop-motion animation 2. Frame composition 3. Camera blocking 4. Situation using different frame composition: MS- Mid Shot; Cu- Close Up Shot; ECu- Extreme Close Up Shot; WS- Wide Shot; EWS- Extreme Wise	1. Demonstration of the process of different 2D animation 2. Demonstration of the details on functionality 3. Explain the situation of using each of the frame composition (MS, Cu, ECu, WS, EWS, WEV, BEV, DA) 4. Explain the reason of camera blocking and animation timing

UNIT 3: INTRODUCTION TO 2D ANIMATION		
Learning Outcome	Theory	Practical
	Angle Shot; WEV- Worm Eye View; BEV – Birds Eye View	
3. Describe the basic process of 2D animation using Adobe Flash	1. Work cycle of 2D animation 2. The process of creating a torsion	1. Differentiation of between 2D and 3D animation 2. Demonstration of creating a torsion
4. Demonstrate the application of Adobe Flash Animation	1.Process of limited animation or cut out animation 2.Email as a mode of capturing conversations 3.Meetings as a mode of capturing conversations	1. Demonstration of creation of flash cartoon

5. TEACHING ACTIVITIES

The teaching and training activities have to be conducted in classroom, laboratory/ workshops and field visits. Students should be taken to field visits for interaction with experts and to expose them to the various tools, equipment, materials, procedures and operations in the workplace. Special emphasis should be laid on the occupational safety, health and hygiene during the training and field visits.

CLASSROOM ACTIVITIES

Classroom activities are an integral part of this course and interactive lecture sessions, followed by discussions should be conducted by trained teachers. Teachers should make effective use of a variety of instructional or teaching aids, such as audio-video materials, colour slides, charts, diagrams, models, exhibits, hand-outs, online teaching materials, etc. to transmit knowledge and impart training to the students.

PRACTICAL WORK IN LABORATORY/WORKSHOP

Practical work may include but not limited to hands-on-training, simulated training, role play, case based studies, exercises, etc. Equipment and supplies should be provided to enhance hands-on learning experience of students. Only trained personnel should teach specialized techniques. A training plan that reflects tools, equipment, materials, skills and activities to be performed by the students should be submitted by the teacher to the Head of the Institution

6. ORGANISATION OF FIELD VISITS/EDUCATIONAL TOURS

In field visits, children will go outside the classroom to obtain specific information from experts or to make observations of the activities. A checklist of observations to be made by the students during the field visits should be developed by the teachers for systematic collection of information by the students on the various aspects. Principals and Teachers should identify the different opportunities for field visits within a short distance from the school and make necessary arrangements for the visits. At least three field visits should be conducted in a year.

7. LIST OF EQUIPMENT AND MATERIAL

The list given below is suggestive and an exhaustive list should be prepared by the teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

1. 3-Hole Punched Paper
 2. Adobe After Effects
 3. Adobe Flash
 4. Adobe Photoshop
 5. Adobe Premiere Pro
 6. Art Gum Eraser
 7. Autodesk Maya
 8. Brushes
 9. Computer System
 10. Demonstration Charts
 11. Digital Camera
 12. Drawing Pencil Sets
 13. Drawing sheets
 14. Flipbook
 15. Internet Connection
 16. Marker/Chalk
 17. Non-Photo Blue Pencils
 18. Paints
 19. Printer
 20. Scanner
 21. Watercolors, Markers, and Pastels
 22. Whiteboard
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