

Pune District Education Association's
Baburaoji Gholap College
Sangvi, Pune 411 027 (Maharashtra).

Proposed Syllabus

for

**Certificate course
In**

Animation and Multimedia

Submitted to

University Grant Commission

**Bahadur Shah Zafar Marg,
New Delhi - 110002.**

Details about Structure/Pattern of Syllabus

1. **Title of the Course:** Certificate course in Animation and Multimedia
2. **Course Level:** Level 4: Certificate
3. **Trade / Sector:** IT & ITES
4. **Syllabus to be implemented from the Academic year:** 2020-2021
5. **Preamble of the Syllabus:**

The Certificate course in Animation and Multimedia is the undergraduate course of Savitribai Phule Pune University, Ganeshkind, Pune 411 007. It is the course leading to Certificate course after the successful completion of six months. This undergraduate credit system based curriculum, would develop a strong fundamentals and specialization in the discipline of Animation and Multimedia. The students pursuing different qualifications in Animation and Multimedia need to develop in depth understanding various aspects of the subject. The principles and fundamental concepts in Animation and Multimedia will be studied in details. The students will have deeper understanding of service sector rules and regulation. The course proposes to skill based education due to which the student's ability of problem solving will be enhanced. The students can develop their own business in Animation and Multimedia service sector.

Objective of the course:

1. To provide skills relating to 'Animation and Multimedia' profession and appropriate content of General Education.
2. To ensure that the students will get adequate knowledge and skills at the end of the course.
3. To provide flexibility to the students as per the National Skills Qualification Framework (NSQF) guidelines.
4. To enhance employability of the graduates and meet industry requirements and are also expected to be equipped to become part of global workforce.
5. To provide vertical mobility to students coming out of 10+2 with vocational subjects.

Introduction:

Salient Features of the Credit System:

- a) Certificate course in 'Animation and Multimedia' has been designed as per the guidelines and objective of UGC, New Delhi, NSDC, New Delhi and NSQF to cater skill force to the retail Management.
- b) Certificate course is of six months duration.
- c) Certificate course 'Animation and Multimedia' is of 30 credits, where one credit theory course is of one clock hour per week running for 15 weeks and one credit for practical course will consist of 10 of laboratory exercise including the revision and setting up the practical. Thus, each credit is equivalent to 15 hours.
- d) In one credit, 10 lectures are assigned for actual teaching in the classroom and 5 lectures are for seminars, discussions, home assignments and library work.
- e) Every student shall complete 30 credits in a minimum of six months.
- f) The student will be declared as failed if s/he does not pass in all credits within a total period of six months. After that such students will have to seek fresh admission as per admission rules prevailing at that time.
- g) In every year, the academic calendar showing dates for commencement and end of each semester, internal assessment examinations and term end examination will be prepared and duly notified before starting of each semester.

The students seeking admission to Certificate course in 'Animation and Multimedia' are hereby informed that they are supposed to adhere to the following rules:

- a) A minimum of 75 % attendance for lectures / practical is the pre-requisite for grant of the course.
- b) There shall be tutorial / practical / surprise test / home assignment / review of article / seminar / industrial visits / training course as a part of internal assessment in the course. The students are supposed to attend all the examinations. The re-test will not be taken for the student absent for the any examination.
- c) The students opting for project course shall follow the rules framed for the same.

6. Faculty of the Course: Science and Technology

7. Eligibility for Admission:

The eligibility condition for admission to Certificate course shall be 10 + 2 or equivalent from any stream.

Duration of the Course:

Award	Duration	Corresponding NSQF level
Certificate	6 months	4

8. Intake capacity of students:

50 students at entry level

9. Examination:

- a) The assessment and evaluation for the Certificate course will be as per the guidelines of Savitribai Phule Pune University for credit based system.
- b) The assessment for the general education component should be according to the guidelines of Savitribai Phule Pune University as per their prevailing standards and procedures.
- c) The assessment for the skill development components will focus on practical demonstrations of the skills acquired. This may be by the consultation with respective Sector Skill Council for designing the examination and assessment pattern for the skill development components. This may be considered by using the designated assessors of Sector Skill Councils/industry associations for the conduct of practical assessment.

I. Pattern of Examination

- i. Internal examination, Final examination, Practical, Oral and Project
- ii. Pattern of the question paper: As per university rules

Evaluation of Students:

- 1 Assessment will consist of (a) internal continuous assessment and (b) final assessment with an equal weightage of 50 % marks each.
- 2 Minimum 30 % marks are required for passing the both internal examination and final examination separately. However, minimum 40 % mark is required for passing in the combined examination of internal and final examination.
- 3 The internal marks will not change and student cannot reappear for internal examination. If student missed the internal examination, s/he will have second chance with the permission of the only concerned teacher. It will be the discretion of concerned teacher and internal departmental assessment committee. In case, s/he wants to repeat internal, s/he can do so only by registering for the said courses during next semester whichever is applicable.
- 4 The answer scripts for the only internal examination and not for final examination may be shown to the concerned student.

5 There shall be revaluation of answer script of final examination only, but not of internal examination.

- **Internal examination:**

The internal assessment for each course would be continuous and dates for all tests will be pre-notified in the time table. The internal assessment committee will coordinate this activity.

- **Theory Courses:**

The students should be encouraged to conduct various academic activities. A teacher must select a variety of the methods for internal assessment like: mid-semester test, online test, computer based examination, open book test (by the concerned teacher choice of allowed books), tutorial, surprise test, oral, assignments, review of article, Seminar presentation and journal / lecture / library notes. It is the responsibility of the student to preserve the documentation of the internal assessment except midterm test answer script.

- **Practical courses:**

It is a continuous evaluation process and practical courses will be evaluated on the basis of following points.

- 1 Performance assessment of each experiment on the basis of attendance, punctuality, journal completion, practical skills, results, oral and analysis.
- 2 Test on practical may be conducted before the end-semester examination.
- 3 Assessment of each experiment shall be done for each practical weekly.
- 4 The student strength of practical batch should be twenty. One practical session is of 3 hour duration for one practical batch.

- **Project Course:**

The project work will be evaluated by incharge of project batch in consultation with project guide. The assessment of project work will be done weekly in the respective batch and evaluation will be on the basis of weekly progress of project work, referencing, oral, results and documentation.

- **Final examination:**

The end-semester examination for 50 marks for all courses would be held nearly two weeks after the completion of teaching for that semester. The paper setting and assessment for all courses would be the responsibilities respective course in-charges. The all activities related to examination like paper setting, evaluation, assessment, preparation of marks-sheets etc. would be coordinated by the examination committee of department.

II. Standard of Passing

Minimum 30 % marks are required for passing the both internal examination and final examination separately. However, minimum 40 % mark is required for passing in the combined examination of internal and final examination.

III. ATKT Rules

A student cannot take register for the next higher courses if s/he fails to complete 50 % credits of the previous two semesters.

IV. Award of Class

Grades will be awarded from grade point average (GPA) of the credits.

GPA Rules:

1. The formula for GPA will be based on Weighted Average. The final GPA will not be printed unless a student passes courses equivalent to minimum 30 credit hours. Total credits hours means the sum of credit hours of the courses which a student has passed.
2. A seven point grade system [guided by the Government of Maharashtra Resolution No. NGO-1298/[4619]/UNI 4 dated December 11, 1999 and University regulations] will be followed.
3. If the GPA is higher than the indicated upper limit in the third decimal digit then the student be awarded higher final grade (e.g. a student getting GPA of 4.492 may be awarded 'A')
4. The grade points will be awarded for each subject. Final GPA along with final grade will be awarded only at the end of course. In case of verification, the existing rules will be applicable. The revaluation result will be adopted if there is a change of at least 10 % marks and in the grade of the course.
5. After the declaration of result, for the improvement of grade, the student can reappear for the examination of 12 credits worth theory courses.
6. A student can go for the grade improvement program only after the declaration of final examination i.e. at the end of next academic year after passing Certificate course and within three years of completion of course. A student can appear for grade improvement programme only once.

V. External Students

There shall be no external students.

VI. Setting of Question Paper/Pattern of Question Paper

All general and skill education components based final examination question papers will be set by the college and centralized assessment of all papers will be done as per the guideline of Savitribai Phule Pune University. The Questions should be designed to test the conceptual knowledge and understanding of the basic concepts of the subject. Theory examination will be of 2 hours duration for each theory course. There shall be 4 questions each carrying marks as shown below. The pattern of question papers shall be:

Question 1 (10 Marks) 5 out of 10 answer in 20 words each of 2 marks

Question 2 (10 Marks) 2 out of 4 short note/answer in 50 words each of 5 marks

Question 3 (15 Marks) 2 out of 3 answer in 150 words each of 7.5 marks

Question 4 (15 Marks) 1 out of 3- answer in 300 words each of 15 marks

VII. Verification/Revaluation

There is also a provision for verification and revaluation. In case of verification, the existing rules will be applicable. The revaluation result will be adopted if there is a change of at least 10 % marks and in the grade of the course. There shall be revaluation of answer script of end semester examination, but not of internal assessment papers.

10. Structure of the Course:

The basic structure (Framework) of the proposed Certificate course syllabus is for six months leading to Certificate course in 'Animation and Multimedia' at Baburaoji Gholap College, Sangvi, Pune 411 027 affiliated to Savitribai Phule Pune University is given at the end of the Annexure - II.

- I. Compulsory Paper:** All papers are compulsory.
- II. Optional Paper:** No optional paper.
- III. Question Paper and Papers:** As mentioned above in the examination section.
- IV. Medium of Instructions:** English

11. Equivalence of previous syllabus along with proposed syllabus

This course is to be sanctioned from academic year 2020-2021. So new syllabus has been proposed. Hence no previous syllabus is available.

12. University Terms:

Certificate course contains total 1 Semester of six months.

13. Subject wise Detailed Syllabus:

A copy of subject wise detailed syllabus is attached with this Annexure - II.

14. Recommended Books:

The list of recommended books is given at the end of syllabus.

15. Qualification of Teacher:

The qualification of faculty will be as per guidelines and norms of University Grant Commission, New Delhi and National Skill Development Council.

**Pune District Education Association's
Baburaoji Gholap College, Sangvi, Pune 411 027 (Maharashtra).**

**Structure of Syllabus
Certificate course in Animation and Multimedia**

Syllabus to be implemented from academic year 2020 - 2021

Year - I			Semester - I
Course	Course type	Course Name	No. of Credits
AM 101	Theory	Computer Fundamentals and cyber security	4
AM 102	Theory	Basics of animation and multimedia technology	4
AM 103	Theory	Media, Design and multimedia devices	4
AM 104	Practical	Introduction to Image and graphics editing	6
AM 105	Practical	Principles of Animation techniques	6
AM 106	Practical	Mobile and PC based audio and video editing	6
Total number of credits			30

Certificate Course in Animation and Multimedia			
Course Name	Computer Fundamentals and cyber security		
Course Code	AM 101		
Class	Certificate	Semester	I
No. of Credits	04	Contact Hours	60
Aim			
<ul style="list-style-type: none"> To apply computer basics and perform installation of related software. 			
Objectives			
<ul style="list-style-type: none"> To introduce skills relating to IT basics, computer applications, programming 			
Course Outcomes			
<ul style="list-style-type: none"> Have basic understanding of personal computer and their operations. Understand basic concepts of IT Able to identify issues related to information security. Can apply computer basics and perform installation, customization of Operating System, related software in a computer for Multimedia purpose following safety precaution. 			
Unit	Topics	Credit	Lectures
Unit I	Computer Fundamentals Computer components, Operating system, software installation process	1	15
Unit II	IT foundations and programming concept Data representation, human computer interface, memory, input output devices, computer organization and architecture, overview of emerging technologies, computer program	1	15
Unit III	Concepts of internet and cyber security Internet browsers, search engines, upload and download techniques in internet, information security, introduction to IT act and penalties for cyber crimes	2	30
References:			
<ol style="list-style-type: none"> Computer Fundamentals By Pradeep K.Sinha&Priti Sinha, sixth Edition (BPB Publication) Fundamentals of Computers by V.Rajaraman Computer Networks.4th edition (2008).Tanen Baum. Pearson Education, India IT Tools, R.K. Jain, Khanna Publishing House Information Security & Cyber Laws, Sarika Gupta, Khanna Publishing House Mastering PC Hardware & Networking, Ajit Mittal, Khanna Publishing House 			

Certificate Course in Animation and Multimedia			
Course Name	Basics of animation and multimedia technology		
Course Code	AM 102		
Class	Certificate	Semester	I
No. of Credits	04	Contact Hours	60
Aim			
<ul style="list-style-type: none"> To understand the fundamentals of Animation, multimedia and applications 			
Objectives			
<ul style="list-style-type: none"> To learn to create animation To understand the components of multimedia To know the application areas of animation and multimedia 			
Course Outcomes			
<ul style="list-style-type: none"> Students will have improved animation skills. Students will be able to create animation projects Students will know the multimedia concepts and applications 			
Unit	Topics	Credit	Lectures
Unit I	Basics of animation Definition, Principles of animation, types of animation, design basics and principles	1	15
Unit II	Animation production pipeline production pipeline, tools required for animation	1	15
Unit II	Multimedia and web technology Movie file formats, movie frames, scene, layers, special effects, multimedia applications, movie editing tools, web applications	2	30
References:			
<ol style="list-style-type: none"> The Complete Animation course by Chris Patmore, By – Barons Educational Series The Animators Survival Kit by Richard Williams Character Animation crash course by Eric Goldberg Fundamentals of Multimedia by Ze- Nian Li, Mark S. Drew 			

Certificate Course in Animation and Multimedia			
Course Name	Media, Design and multimedia devices		
Course Code	AM 103		
Class	Certificate	Semester	I
No. of Credits	04	Contact Hours	60
Aim			
<ul style="list-style-type: none"> To understand the basics of components of animation and multimedia. 			
Objectives			
<ul style="list-style-type: none"> To identify photo capturing and storage devices and accessories. 			
Course Outcomes			
<ul style="list-style-type: none"> Can understand the basic techniques of digital photography Can perform safe handling of multimedia devices 			
Unit	Topics	Credit	Lectures
Unit I	Media and Design Digital imaging and Printing, advertising design, campaign design, integrated methods of advertising, graphic design for interactive media	2	30
Unit II	Safe handling of multimedia devices Digital camera, video camera, microphone, webcam, basics of photography, video recording, data transfer, lighting concepts, focus	2	30
References:			
<ol style="list-style-type: none"> Engineering Graphic & Design, Pradeep Jain, Khanna Publishing House Multimedia and Graphics, V.K. Jain, Khanna Publishing House Multimedia & Web Technology, Ramesh Bangia, Khanna Publishing House 			

Certificate Course in Animation and Multimedia			
Course Name	Introduction to Image and graphics editing		
Course Code	AM 104		
Class	Certificate	Semester	I
No. of Credits	06	Contact Hours	90
Aim			
<ul style="list-style-type: none"> To perform editing of images and graphics using basic tools. 			
Objectives			
<ul style="list-style-type: none"> To learn to edit digital images. To learn graphics designing techniques 			
Course Outcomes			
<ul style="list-style-type: none"> Develop editing skills. Will be able to create professional designs. Can create graphics effects. Creation of basic modelling 			
Unit	Topics	Credit	Lectures
Unit I	Image Editing Image editing tool such as Photoshop / Adobe illustrator or equivalent, crop and rotate image, change image size, pixels, resolution, colour modes, retouch to fix images, transformation, colour correction, effects and filters	3	45
Unit II	Graphics Editing Fundamental techniques of drawing, applying basic settings, appearances, modifying graphic styles	3	45
References:			
<ol style="list-style-type: none"> Learning Illustrator, Ramesh Bangia, Khanna Publishing House Photo editing and presentation by Douglas Holleley 			

Certificate Course in Animation and Multimedia			
Course Name	Principles of Animation techniques		
Course Code	AM 105		
Class	Certificate	Semester	I
No. of Credits	06	Contact Hours	90
Aim			
<ul style="list-style-type: none"> To apply and implement the settings for animation effects. 			
Objectives			
<ul style="list-style-type: none"> To learn to create animation for projects To create sequence. To apply different effects. 			
Course Outcomes			
<ul style="list-style-type: none"> Able to create animation projects Able to use frames, layers, timeline Able to apply animation effects in PPT 			
Unit	Topics	Credit	Lectures
Unit I	Introduction to Animation tool Introduction to Flash / equivalent, User interface, image editing tool and graphics, authoring tool, different graphics, drawing tools, text tool, working with timeline, key frames, motion tweens, transition effects, basic action script,	2	30
Unit II	Applications of Animation 2D, 3D animation, Application areas such as movies, gaming etc.	2	30
Unit III	Animations in PPT Types of animation, settings	2	30
References:			
<ol style="list-style-type: none"> Multimedia and Animation, V.K. Jain, Khanna Publishing House The Complete Animation course by Chris Patmore, By – Barons Educational Series Anatomy of the Artist – Thompson & Thompson. Flash CS4 Professional Bible Published by Wiley Publishing (Robert R & Snow D.) 			

Certificate Course in Animation and Multimedia			
Course Name	Mobile and PC based audio and video editing tools		
Course Code	AM 106		
Class	Certificate	Semester	I
No. of Credits	06	Contact Hours	90
Aim			
<ul style="list-style-type: none"> To implement audio and video editing using software tools. 			
Objectives			
<ul style="list-style-type: none"> To record audio and save the file. To record video and save in different formats. To refine the sequence and apply effects. 			
Course Outcomes			
<ul style="list-style-type: none"> Implement video clippings and footage. Addition of captions, sequence, titles and audio timeline. Creating and using compositions and applying special effects. 			
Unit	Topics	Credit	Lectures
Unit I	Audio recording techniques Manipulating audio,, edit, record, balancing sound levels, audio effects,	2	30
Unit II	Video recording techniques Softwares to record videos, settings, noise removal, effects, File formats	2	30
Unit III	Video editing process Importing and exporting audio, video and graphics, edit, manipulate these in visual timeline, tools for editing clips, project	2	30
References:			
<ol style="list-style-type: none"> Audio & Video Systems, Bali & Bali, Khanna Publishing House Editing Digital video by Robert Goodman, Patrick McGrath How to edit videos: Learn about video editing software by Nick Miller 			