Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

(An Autonomous College Affiliated to Savitribai Phule Pune University)

Framework of Syllabus

For

B. Sc. (Animation)

Choice Based Credit System (CBCS) Syllabus
Under National Education Policy (NEP)

To be implemented from Academic Year 2024-2025

Level:- 4.5 (First Year) Sem:I

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2)+ (T/P)(2) or T(4)	24CsAniU1101	Graphic Designing I	2		2		20	30	50
	24CsAniU1102	Lab Course on Graphic Designing I		2		4	20	30	50
Subject 2 T(2)+ (T/P)(2) or T(4)	24CsAniU1201	2D Animation I	2		2		20	30	50
	24CsAniU1202	Lab Course on 2D Animation		2		4	20	30	50
Subject 3 T(2)+ (T/P)(2) or T(4)	24CsAniU1301	Computer Application –I (Web Technology : HTML , Adv HTML)	2		2		20	30	50
	24CsAniU1302	Lab Course on 24CsAniU1101		2		4	20	30	50
IKS T(2)	24CpCopU1901	Generic IKS	2		2		20	30	50
GE/OE (T/P) (2)	24CsAniU1401	Lab Course on Foundation Art		2		4	20	30	50
SEC (P) (2)	24CsAniU1601	Lab Course on Foundation Art		2			20	30	50
AEC T(2)	24CpCopU1701 / 24CpCopU1702	MIL-I (Hindi) / MIL-I (Marathi)	2		2		20	30	50
VECT (2)	24CpCopU1801	Environmental Science	2		2		20	30	50
Total			12	10	12	10			550

Level:- 4.5 (First Year) Sem:II

Course Type	Course Code	Course Title	Credits		Teaching Scheme Hr/Week		Evaluation Scheme and Max Marks		
			TH	PR	TH	PR	CE	ESE	Total
Subject 1 T(2)+ T/P(2) or T(4)	24CsAniU2101	Graphic Designing II	2		2		20	30	50
	24CsAniU2102	Lab Course on 24CsAniU2101		2		4	20	30	50
Subject 2 T(2)+ P(2)	24CsAniU2201	2D Animation II	2		2		20	30	50
	24CsAniU2202	Lab Course on 24CsAniU2201		2		4	20	30	50
Subject 3 T(2)+ P(2)	24CsAniU2301	Computer Application –II (C Programming)	2		2		20	30	50
	24CsAniU2302	Lab Course on 24CsAniU2101		2		4	20	30	50
GE/OE (T/P)(2)	24CsAniU2401	Lab Course on Calligraphy & Typography	2		2		20	30	50
SEC P(2)	24CsAniU2601	Lab Course on Introduction to 3D		2		4	20	30	50

		Design							
AEC T(2)	24CpCopU2703	English Communication Skills I	2		2		20	30	50
VEC T(2)	24CpCopU2801	Democracy, Election and Governance	2		2		20	30	50
CC(2)	24CpCopU2001/ 24CpCopU2011 / 24CpCopU2021 / 24CpCopU2031 / 24CpCopU2041 / 24CpCopU2051 / 24CpCopU2061 / 24CpCopU2071	Physical Education / Cultural Activities / NSS / NCC / Fine Arts / Applied Arts / Visual Arts / Performing Arts	2		2		20	30	50
Total			14	08	14	16			550

Level:- 5.0 (Second Year) **Sem:III**

Course Type	**Course Code**	**Course Title**	**Credits**		**Teaching Scheme Hr/Week**		**Evaluation Scheme and Max Marks**		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24CsAniU3101	Elements of 3D Designing I	2		2		20	30	50
	24CsAniU3102	Graphic Design	2		2		20	30	50
	24CsAniU3103	Lab Course on 24CsAniU3101 & 24CsAniU3102		2		4	20	30	50
VSC P(2)	24CsAniU3501	Lab Course on Digital Editing		2		4	20	30	50
IKS (T/P)(2)	24CsAniU3901	Indian Art Culture	2		2		20	30	50
FP P(2)	24CsAniU3002	Field Project I		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24CsAniU3301	Computer Application –II (Object Oriented Programming)	2		2		20	30	50
	24CsAniU3302	Lab Course 24CsAniU3301		2		4	20	30	50
GE/OE (T/P) (2)	24CsAniU3401	Lab Course on Graphic Designing		2		4	20	30	50
AEC T(2)	24CpCopU3703	English Communication Skills II	2		2		20	30	50
CC T(2)	24CpCopU3001	Online Course on Yoga	2		2		20	30	50
Total			12	10	12	20			550

Level:- 5.0 (Second Year) **Sem:IV**

Course Type	**Course Code**	**Course Title**	**Credits**		**Teaching Scheme Hr/Week**		**Evaluation Scheme and Max Marks**		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2 or 4), (T/P)(2)	24CsAniU4101	Elements of 3D Animation	2		2		20	30	50
	24CsAniU4102	Motion Graphics	2		2		20	30	50
	24CsAniU4103	Lab Course on 24CsAniU4101 & 24CsAniU4102		2		4	20	30	50
VSC P(2)	24CsAniU4501	Lab Course on Creative Writing		2		4	20	30	50

CEP P(2)	24CsCopU4003	Community Engagement Project		2		4	20	30	50
Minor (T/P)(2+2 or 4)	24CsAniU4301	Computer Application –II (Java Script)	2		2		20	30	50
	24CsAniU4302	Lab Course on 24CsAniU4301		2		4	20	30	50
GE/OE (T/P) (2)	24CsAniU4401	Lab Course on e-content Development (Video Production)		2		4	20	30	50
SEC T(2)	24CsAniU4601	Production Process	2		2		20	30	50
AEC T(2)	24CpCopU4701 / 24CpCopU4702	MIL-II (Hindi) / MIL-II (Marathi)	2		2		20	30	50
CC T(2)	24CpCopU4001	Health and Wellness	2		2		20	30	50
Total			12	10	12	20			550

Level:- 5.5 (Third Year) **Sem:-V**

Course Type	**Course Code**	**Course Title**	**Credits**		**Teaching Scheme Hr/Week**		**Evaluation Scheme and Max Marks**		
			TH	PR	TH	PR	CE	EE	Total
Major Core T(2+2+2+2or 4 + 2+2 or 4 + 4) P(2+2 or 4)	24CsAniU5101	Game Designing I	2		2		20	30	50
	24CsAniU5102	VFX I	2		2		20	30	50
	24CsAniU5103	Digital Photography	4		4		20	30	50
	24CsAniU5104	Lab Course on 24CsAniU5101		2		4	20	30	50
	24CsAniU5105	Lab Course on 24CsAniU5102		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24CsAniU5201	Advanced 3D Animation	2		2		20	30	50
	24CsAniU5203	Lab Course on 24CsAniU5203		2		4	20	30	50
	24CsAniU5203	Digital Audio Work (Sound Recording)	2		2		20	30	50
	24CsAniU5204	Lab Course on 24CsAniU5203		2		4	20	30	50
VSC P(2)	24CsAniU5501	Lab Course on Simulation and Dynamics		2		4	20	30	50
FP (2)	24CsAniU5001	Field Project II		2		4	20	30	50
Minor (T/P) (2)	24CsAniU5302	Lab Course on Computer Application –III (C#)	2		2		20	30	50
Total			12	10	12	20			550

Level:- 5.5 (Third Year) **Sem:-VI**

Course Type	**Course Code**	**Course Title**	**Credits**		**Teaching Scheme Hr/Week**		**Evaluation Scheme and Max Marks**		
			TH	PR	TH	PR	CE	EE	Total

Major Core T(2+2+2+2 or 4+2+2 or 4+4) P(2+2 or 4)	24CsAniU6101	Game Production II	2		2		20	30	50
	24CsAniU6102	VFX II	2		2		20	30	50
	24CsAniU6103	Cinematography	4		4		40	60	100
	24CsAniU6105	Lab on 24CsAniU6101		2		4	20	30	50
	24CsAniU6106	Lab on VFX II		2		4	20	30	50
Major Elective (T/P) (2+2 or 4)	24CsAniU6201	Animation Techniques (Compositing)	4		4		40	60	100
	24CsAniU6203	Sound Processing	2		2		20	30	50
	24CsAniU6204	Lab Course on 24CsAniU6203		2		4	20	30	50
VSC P(2)	24CsAniU6501	Lab Course on e-Journalism		2		4	20	30	50
OJT (2)	24CsAniU6004	On Job Training		4		8	40	60	100
Total			10	12	10	24			550

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Level:- 4.5 (First Year) Sem:I

Subject 1 (Theory)
Course Code : 24CsAniU1101
Course Name : Graphic Designing-I

Teaching Scheme: TH: 2 Hours Theory/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Software Skills

Course Objectives:

- To understand aspects of digital design
- Learn to edit digital images
- To understand the basic terminologies used in Graphic designing.

Course Outcomes:

On completion of the course, student will be able to:

- Students will have improved their software knowledge.
- Students will develop editing skills.
- Students will be able to create professional designs.

Course Contents:

Unit 1	Introduction to digital image editing	6 lectures

	• Raster Image • Vector Image • Image File Formats • Design Overview	
Unit 2	Photoshop Workspace	2 lectures
	• Interface Basic • Palettes and Menus • Toolbar - Selection Tools, Painting tools, Editing and retouching tools • Text tools. • Ruler, Guides and Grids	
Unit 3	Design Principles	4 lectures
	• Graphic Composition & Layouts • Fundamentals of Design (Form Space and Structure) • Design Process : Problem Solving	
Unit 4	Color	6 lectures
	• Color Mode, Color Correction • Levels and Curves • Basics and Color Palettes • Lighting and Shadows • Color palettes used in Films • Blending modes in software	
Unit 5	Typography	6 lectures
	• Basic Typography (Lettering & Layouts) • Brushes, Fonts and Layers • Masking	
Unit 6	Design Project	5 lectures
	• Information Design • Signs and Symbol Design • Web Design Experiential Learning : Digital Painting	

Reference books:

- Adobe Photoshop Classroom in a Book- by Andrew Faulkner and Conrad Chavez-AdobePress, 2021
- Adobe Photoshop CC Bible-by Lisa DaNae Dayley and Brad Dayley-Wiley-2013
- Graphic Design: The New Basics-by Ellen Lupton and Jennifer Cole Phillips-Princeton Architectural Press-2015
- Logo Design Love: A Guide to Creating Iconic Brand Identities-by David Airey-Pearson Education-2014

Reference Links:

- Official Adobe Photoshop website: https://www.adobe.com/products/photoshop.html
- Photoshop Essentials (Photoshop tutorials and resources): https://www.photoshopessentials.com/
- Dribbble (Online community for showcasing and discovering design work): https://dribbble.com/
- 99designs (Online marketplace for graphic design services): https://99designs.com/

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 1 (Practical)
Course Code : 24CsAniU1102
Course Name : Lab Course on 24CsAniU1102

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Software Skills (Photoshop)

Practical Topics:

Practical 1	Composing a moodboard in Photoshop
Practical 2	Removing background and morphing images
Practical 3	Making artwork using paper effect and clipping mask
Practical 4	Color correcting an image
Practical 5	Making an artwork using typography
Practical 6	Design using masking,blending modes and adding effects to an image
Practical 7	Converting black and white image to colorful image
Practical 8	Converting an image from day to night
Practical 9	Design a movie poster
Practical 10	Design menu card
Practical 11	Product packaging Design
Practical 12	Design logo and brand guidelines for local shop

Practical 13	Branding Visiting Card, Letter head, Envelop Design
Practical 14	Digital painting

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 2 (Theory)

Course Code : 24CsAniU1201

Course Name : 2D Animation I

Teaching Scheme: TH: 2 Hours Theory/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Basic drawing skill
- Creative ability.

Course Objectives:

- To understand Fundamentals of Animation
- Learn to create Animatics for animation projects
- Learn to create simple 2D animations

Course Outcomes:

On completion of the course, student will be able to –

- Students will have improved their animation skills.
- Students will develop storyboard skills.
- Students will be able to create animation projects in 2D.

Course Contents

Unit 1	Introduction to Animation	7 lectures
	• Animation Definition • Science behind Animation • Basics of 2D software	
Unit 2	Types of Animation	6 lectures

	• Traditional • Stop motion • 2D Animation • 3D Animation • Introduction to timeline and layers.	
Unit 3	2D software	6 lectures
	• Introduction to tools and menus • 12 Basic principles of animation • Creating basic animations	
Unit 4	Advanced features of software	6 lectures
	• Masking • Loop animation • Scene and symbols • Tween and Alpha	
Unit 5	Animation Production Pipeline	6 lectures
	• Terms used in Animation • Introduction to storyboard	

Reference books:

- The Animator's Survival Kit" by Richard Williams-Publisher: Faber & Faber
- The Illusion of Life: Disney Animation" by Frank Thomas and Ollie Johnston-Publisher: Disney Editions
- The Complete Idiot's Guide to Animation" by Josiah Neeley-Publisher: Alpha Books

Reference Links

- The 12 Principles of Animation" by Disney Animation Studios: https://www.disneyanimation.com/studio/animation-basics/
- The Animator's Survival Kit" by Richard Williams: https://www.theanimatorssurvivalkit.com/
- Introduction to Animation" by Khan Academy: https://www.khanacademy.org/partner-content/pixar/introduction-to-animation

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 2 (Practical)
Course Code : 24CsAniU1202
Course Name : Lab Course on 24CsAniU1202

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Basic drawing skill
- Creative ability.

Course Objectives:

- To understand Fundamentals of Animation
- Learn to create Animatics for animation projects
- Learn to create simple 2D animations

Course Outcomes:

On completion of the course, student will be able to –

- Students will have improved their animation skills.
- Students will develop storyboard skills.
- Students will be able to create animation projects in 2D.

Practical Topics:

Practical 1	Making a bouncing ball animation
Practical 2	Table fan Animation
Practical 3	Moving car animation
Practical 4	Oarman Cycle
Practical 5	Giant Wheel Animation
Practical 6	Bi-ped walk cycle

Practical 7	Bird Fly cycle
Practical 8	Frog jump Animation
Practical 9	Quadruped walk cycle
Practical 10	Moving car animation
Practical 11	Animation using Masking
Practical 12	Making loop .gif animation
Practical 13	Making an animation of a spinning globe
Practical 14	Design Project: Adapting a children's story into a storyboard
Practical 15	Design Project: Completing all the pre production work for a 2D short film.

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 3 (Theory)
Course Code : 24CsAniU1301
Course Name : Computer Application –I
(Web Technology : HTML , Adv HTML)

Teaching Scheme: TH: 2 Hours Theory/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- A desire to understand computational approaches to problem solving.
- mathematical and logical aptitude

Course Objectives:

- To understand the nature of programming as human activity
- To learn and experience main components of programming process
- To understand main control structures of procedural programming languages
- To learn and being able to use major programming patterns
- To understand the principles of data storage and manipulation

Course Outcomes:

On completion of the course,

Students will:

- Master many of the fundamental concepts that underlie programming language syntax and semantics through a comparative study of several languages and their features
- Learn several new programming language features and paradigms
- Gain the ability to study conceptual linguistic issues without being blinded by a particular language's implementation
- Gain insight into the problem of designing new languages

Course Contents

Unit 1	Introduction to Web Technologies	3 lectures
	1.1 Introduction to Web Technologies 1.2 How does the Website work? 1.3 Clients- Servers and Communication 1.4 Client and Server Scripting Languages 1.5 Internet-Basic, Internet Protocols(HTTP,FTP,IP) 1.6 World Wide Web(WWW) 1.7 HTTP request message, HTTP response message 1.8 Types of Websites(Static and Dynamic Websites)	
Unit 2	HTML – OVERVIEW	2 lectures
	2.1 Basics in Web Design *2.2 Five Golden rules of web designing* 2.3 *Home Page Layout* 2.4 Basic HTML Document 2.5 HTML Tags 2.6 HTML Document Structure 2.7 The <!DOCTYPE> Declaration	
Unit 3	HTML – BASIC TAGS	5 lectures
	3.1 Heading Tags ,Paragraph Tag ,Line Break Tag 3.2 Centering Content, Horizontal Lines 3.3 HTML – COMMENTS 3.3 HTML link tag 3.5Html Background with Colors, Html Background with Images 3.6 Colors and fonts 3.7 Marquee 3.8 HTML – LISTS	
Unit 4	HTML – FORMATTING	4 lectures
	4.1 Bold Text ,Italic Text, Underlined Text, Strike Text 4.2 Superscript Text, Subscript Text 4.3 Inserted Text 4.4 Deleted Text 4.5 Larger Text	

	4.6Smaller Text 4.7 Grouping Content	
Unit 5	HTML – IMAGES	5 lectures
	5.1 Insert Image 5.2 Set Image Location 5.3 Set Image Width/Height 5.4 Set Image Border 5.5 Set Image Alignment	
Unit 6	HTML – TABLES	6 lectures
	6.1 Table Heading 6.2 Cellpadding and Cellspacing Attributes 6.3 Colspan and Rowspan Attributes 6.4 Tables Backgrounds 6.5 Table Height and Width 6.6 Table Caption 6.7 Table Header, Body, and Footer 6.8 Nested Tables	
Unit 7	Advanced HTML tags	7 lectures
	7.1 Embedding Audio and Video. 7.2 Working with Text 7.3 Working with Frames 7.4 Working with controls	

Reference Books : -

1. Complete HTML- Thomas Powell

2. HTML and JavaScript–Ivan Bayross

Reference Links

1. https://www.tutorialspoint.com/
2. https://www.w3schools.com/

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 3 (Practical)
Course Code : 24CsAniU1301
Course Name : Lab Course on 24CsAniU1301
(Web Technology : HTML , Adv HTML)

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Practical Topics:

Practical 1	Create an html5 page which will display names of your family members on separate lines in different sizes. State size of each line in its text..
Practical 2	.Create an html5 page containing the polynomial expression as follows a + a1x+ a2x2 + a3 x3
Practical 3	Create a webpage using list tags of HTML.
Practical 4	Create a webpage to include images using HTML tags.
Practical 5	Create an employee registration webpage using HTML form objects.
Practical 6	Create an HTML file (e.g. first_page.html) that specifies a page that contains a heading and two paragraphs of text. Use the HTML tags , , and in this exercise. As the texts in the heading and paragraphs you can use any texts you like. ➔ Add an unordered list to this web page. An unordered list should look like the following when it is shown by a browser: ◆ An unordered list can be specified with the tags and ◆ An unordered list typically contains a number of list items that can be specified with tags and ◆ After you have created your unordered list, check out what happens when you convert it to an ordered list by replacing the tags and with and , respectively. ➔ Add an image to your web page. In this exercise you must use

<table>
<tr><td></td><td>the <img> tag. As an image, you can use any .jpg or .png file you find on the Internet.</td></tr>
<tr><td>Practical 7</td><td>Create an html5 page with following specifications
a. Title should be about MYCOLLEGE
b. Put the windows Logo image in the background
c. Place your College name at the top of the page in large text followed by
address in smaller size
d. Add names of courses offered each in a different color, style and typeface
e. Add scrolling text with a message of your choice
f . Add the college image at the bottom.</td></tr>
<tr><td>Practical 8</td><td>HTML tags like <a> can have certain attributes. The href attribute is mandatory in the <a> tag.
Additionally it is possible to use the title attribute which specifies a text that emerges when the mouse
the cursor is moved above a link. This kind of text is called a tool tip. Modify the link that you created in
the previous exercise so that a tooltip says "This leads you to another page." when the mouse cursor is
over the link.</td></tr>
<tr><td>Practical 9</td><td>It is possible to use a picture (image) as a link. Modify your page so that the picture that is on your
page will also serve as a link that leads to another page.</td></tr>
<tr><td>Practical 10</td><td>Write the HTML5 code which generates the following output.
<table><tr><th>Country</th><th colspan="2">Population (In Crores)</th></tr><tr><td rowspan="3">INDIA</td><td>1998</td><td>85</td></tr><tr><td>1999</td><td>90</td></tr><tr><td>2000</td><td>100</td></tr><tr><td rowspan="3">USA</td><td>1998</td><td>30</td></tr><tr><td>1999</td><td>35</td></tr><tr><td>2000</td><td>40</td></tr><tr><td rowspan="3">UK</td><td>1998</td><td>25</td></tr><tr><td>1999</td><td>30</td></tr><tr><td>2000</td><td>35</td></tr></table></td></tr>
<tr><td>Practical 11</td><td>Design a website for the Tourism Sites of a given City. There should be at least 15 web-pages present
on the web-site. There should be:
● One Home page that leads to other pages. The Home page should contain the name of the City
as heading along with a logo. There should be a tab with the following links:</td></tr>
</table>

	• Home; • Heritage; • Hotel Booking; • Gallery. There should be an appropriate description of the college on the home page. • One Heritage page which contains a list of all the Heritage Sites present in the city. The list should be a list of Pictures. There should be a minimum of ten heritage sites. Each Image entry in the list should be a HTML link/button that leads to a web-page totally dedicated to the Heritage Site itself. • Each Heritage Site should have its own dedicated web-page. This page should contain a description about the site along with its history. • The Hotel booking page basically contains a form that a person needs to fill up in order to stay in a hotel. The form should ask all the necessary questions using appropriate form elements. • One gallery page contains a set of photos taken of the Heritage Sites throughout the city. Please note that each web-page in this website should have the same background Image/color. The looks of each page should be similar
Practical 12	Create an html5 page which will display names of all Subjects of BSc Animation on separate lines in different colors. State color of each line in its text.
Practical 13	Create an html5 page containing the polynomial expression as follows H2so4
Practical 14	Write the HTML5 code which generates the following output. • Coffee • Tea • Black Tea • Green Tea 1] Africa 2] China • Milk
Practical 15	Create an html5 page which will display names of players of Indian cricket team with all the different text styles (bold, italic and underlined) and its combinations on separate lines. State style of each line in its text.
Practical 16	Create an html5 page with following specifications a. Title should be about Seven Wonders

	b. Place City name at the top of the page in large text and in blue color c. Add names of landmarks of each place in a different color, style and typeface d One of the landmark, your college name should be scrolling e. Add scrolling text with a message of your choice f . Add some image at the bottom
Practical 17	Create the following table using HTML tag . **yearly placement details** years 2010 2011 2012 no of students appared 400 550 700 distinction 150 175 250 Iclass 125 200 225 II class 120 125 100
Practical 18	Create an html5 page which will display names of India's President and their work period, since our independence on separate lines in different colors. State color of each line in its text.

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Open Elective (OE)

Course Code : 24CsAniU1401

Course Name : Lab Course on Foundation Art

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Drawing Skills, Creative & Logical thinking ability

Course Objectives:

- To understand drawing as the most powerful visual representation, to make hands free.
- Learn to create simple objects, Perspective drawing, lights and shades, how to create cartoons drawing.

Course Outcomes:

On completion of the course, student will be able to–

- Students will have improved their visualization power to explore new ideas .
- Students will develop drawing skills.
- Students will be able to create professional artworks.

Practical Topics:

Practical 1	Primitive Geometry
Practical 2	Perspective Drawing

Practical 3	Introduction to Anatomy
Practical 4	Foreshortening
Practical 5	Light and Shadow Study
Practical 6	Pencil Shading
Practical 7	Color Theory
Practical 8	Color Symbolism
Practical 9	Cartoon Drawing
Practical 10	Facial Expressions
Practical 11	Caricature Drawing
Practical 12	Rapid Sketching
Practical 13	Outdoor Sketching
Practical 14	Memory Drawing
Practical 15	Coloring or finishing Artwork

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Skill Education System (SEC)

Course Code : 24CsAniU1601

Course Name : Lab Course on Foundation Art

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Drawing Skills, Creative & Logical thinking ability

Course Objectives:

- To understand drawing as the most powerful visual representation, to make hands free.
- Learn to create simple objects, Perspective drawing, lights and shades, how to create cartoons drawing.

Course Outcomes:

On completion of the course, student will be able to–

- Students will have improved their visualization power to explore new ideas .
- Students will develop drawing skills.
- Students will be able to create professional artworks.

Practical Topics:

Practical 1	Primitive Geometry
Practical 2	Perspective Drawing
Practical 3	Introduction to Anatomy

Practical 4	Foreshortening
Practical 5	Light and Shadow Study
Practical 6	Pencil Shading
Practical 7	Color Theory
Practical 8	Color Symbolism
Practical 9	Cartoon Drawing
Practical 10	Facial Expressions
Practical 11	Caricature Drawing
Practical 12	Rapid Sketching
Practical 13	Outdoor Sketching
Practical 14	Memory Drawing
Practical 15	Coloring or finishing Artwork

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Level:- 4.5 (First Year) Sem:II

Subject 1 (Theory)

Course Code : 24CsAniU2101

Course Name : Graphic Designing-II

Teaching Scheme: TH: 2 Hours Theory/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Software Skills

Course Objectives:

- To understand aspects of digital design
- Learn Graphic Designing techniques

Course Outcomes:

On completion of the course, student will be able to–

- Students will have improved their software knowledge.
- Students will develop Graphic designing skills.
- Students will be able to create professional Graphic designs.

Course Contents

Unit 1	Introduction to digital designing	6 lectures
	• Laws of Typography • Digital Design Principles • Design measurements, crop marks, layouts	

Unit 2	CorelDraw Workspace	6 lectures
	• CorelDraw Interface • Menu bar Options • Toolbar options • Convert to curves • Envelop	
Unit 3	Working With Shapes	6 lectures
	• Creating Objects • Editing Objects • Layout and structuring • Logo Design	
Unit 4	Text Options	6 lectures
	• Character formatting • Paragraph formatting • Columns • Industrial Design	
Unit 5	Printing Design	6 lectures
	• File and File formats for printing • Formatting for Printing • Color in designing • Proofreading	
Unit 6	Working with Bitmaps	5 lectures
	• Edit Bitmap • Power clip options • Trace bitmap • Bitmap Effects • Design Project: Designing for printing	

Reference books:

- CorelDRAW X8: The Official Guide" by Gary David Bouton Publisher: McGraw-Hill Education
- Logo Design Love: A Guide to Creating Iconic Brand Identities-by David Airey-Pearson Education-2014
- Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students"
  Author: Ellen Lupton
  Publisher: Princeton Architectural Press

Reference Links :

- Dribbble (Online community for showcasing and discovering design work): https://dribbble.com/
- 99designs (Online marketplace for graphic design services): https://99designs.com/
- CorelDRAW Official Website: https://www.coreldraw.com/

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 1 (Practical)
Course Code : 24CsAniU2102
Course Name : Lab Course on 24CsAniU2101

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Basic drawing skill
- Creative ability.

Course Objectives:

- To understand Fundamentals of Animation
- Learn to create Animatics for animation projects
- Learn to create simple 2D animations

Course Outcomes:

On completion of the course, student will be able to –

- Students will have improved their animation skills.
- Students will develop storyboard skills.
- Students will be able to create animation projects in 2D.

Practical Topics:

Practical 1	Creating Custom Logos: Learn how to design and create professional logos using CorelDRAW's vector-based tools and techniques.
Practical 2	Pattern Creation
Practical 3	Digital Illustration: Discover the capabilities of CorelDRAW for digital illustration, including drawing techniques, coloring, shading, and creating unique artwork.
Practical 4	Typography and Text Effects

Practical 5	Packaging Design: Learn how to create eye-catching packaging designs using CorelDRAW, considering structural considerations, graphics, and branding elements.
Practical 6	Web Design Elements: Explore the use of CorelDRAW in creating web design elements, such as icons, buttons, banners, and backgrounds, with a focus on scalability and optimization.
Practical 7	Designing Brochures and Flyers
Practical 8	Create Vector Illustrations
Practical 9	Calender design using script in Corel Draw
Practical 10	Advertise Design
Practical 11	Redesign any popular brand logo
Practical 12	Character Designing
Practical 13	Car Modeling
Practical 14	Product modeling illustration
Practical 15	Design Project: Creating a brand and its image

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 2 (Theory)

Course Code : 24CsAniU2201

Course Name : 2D Animation II

Teaching Scheme: TH: 2 Hours Theory/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Basic drawing skill
- Creative ability.

Course Objectives:

- To understand Fundamentals of Animation
- Learn to create Animatics for animation projects
- Learn to create simple 2D animations

Course Outcomes:

On completion of the course, student will be able to –

- Students will have improved their animation skills.
- Students will develop storyboard skills.
- Students will be able to create animation projects in 2D.

Course Contents

Unit 1	Character Design	7 lectures
	• Character Bible • Character turnaround • Props	
Unit 2	Background design	6 lectures

	• Outdoor background • Indoor background • Background Themes • Color Palette of Background	
Unit 3	Animatics	6 lectures
	• Graphic Animation • Line testing • Animatics with sound	
Unit 4	Animation Movements	6 lectures
	• Trajectory • Observing real life action • Sequential movement drawing	
Unit 5	In- between Drawing	6 lectures
	• Pose to pose Animation • Straight ahead Animation	
Unit 6	Experiential Learning	2 lectures
	• Creating an animated Short film	

Reference books:

- The Animator's Survival Kit" by Richard Williams-Publisher: Faber & Faber
- The Illusion of Life: Disney Animation" by Frank Thomas and Ollie Johnston-Publisher: Disney Editions
- The Complete Idiot's Guide to Animation" by Josiah Neeley-Publisher: Alpha Books

Reference Links

- The 12 Principles of Animation" by Disney Animation Studios: https://www.disneyanimation.com/studio/animation-basics/
- The Animator's Survival Kit" by Richard Williams: https://www.theanimatorssurvivalkit.com/
- Introduction to Animation" by Khan Academy: https://www.khanacademy.org/partner-content/pixar/introduction-to-animation

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 2 (Practical)
Course Code : 24CsAniU2202
Course Name :Lab Course on 24CsAniU2201

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Basic drawing skill
- Creative ability.

Course Objectives:

- To understand Fundamentals of Animation
- Learn to create Animatics for animation projects
- Learn to create simple 2D animations

Course Outcomes:

On completion of the course, student will be able to –

- Students will have improved their animation skills.
- Students will develop storyboard skills.
- Students will be able to create animation projects in 2D.

Practical Topics:

Practical 1	Butterfly Animation
Practical 2	Swing movements
Practical 3	Climbing action
Practical 4	Fish swimming Animation
Practical 5	Dance Animation

Practical 6	Bi-ped Run cycle
Practical 7	Bird Fly cycle
Practical 8	Bi-ped Front and back walk cycle
Practical 9	Quadruped Run cycle
Practical 10	Swimming movements
Practical 11	Contraption Animation
Practical 12	Crain Movement
Practical 13	Making use of different scenes in one animation
Practical 14	Design Project: Creating a stop motion animation project
Practical 15	Design Project: Creating a short film on a children's story/poem

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 3 (Theory)
Course Code : 24CsAniU2301
Course Name : Computer Application –II
(C Programming)

Teaching Scheme: TH: 2 Hours Theory/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- A desire to understand computational approaches to problem solving.
- mathematical and logical aptitude

Course Objectives:

- To understand the nature of programming as human activity
- To learn and experience main components of programming process
- To understand main control structures of procedural programming languages
- To learn and being able to use major programming patterns
- To understand the principles of data storage and manipulation

Course Outcomes:

On completion of the course,

Students will:

- Master many of the fundamental concepts that underlie programming language syntax and semantics through a comparative study of several languages and their features
- Learn several new programming language features and paradigms
- Gain the ability to study conceptual linguistic issues without being blinded by a particular language's implementation
- Gain insight into the problem of designing new languages

Course Contents

Unit 1	Introduction to C	10 lectures

	• History • Structure of a C program • Functions as building blocks • Keywords • Identifiers • Variables • Constants character, integer, oat, string, escape sequences • Data types:-built-in and user defined • Operators and Expressions: Operator types (arithmetic, relational, logical, assignment, bitwise, conditional, other operators), • Precedence and associatively rules. Simple programming	
Unit 2	Control Structures	5 lectures
	• Decision making structures: If, if-else, switch • Loop Control structures: While, do-while, for • Nested structures break and continue	
Unit 3	Functions in C	5 lectures
	• Definition and declaration • Parameter Passing to functions • Global and local variables • Formal and actual parameters	
Unit 4	Arrays	6 lectures
	• Array declaration, initialization • Types one, two and multidimensional Passing arrays to functions	

Unit 5	Pointers	4 lectures
	• What is a pointer? • Use of pointers. • Implementation of pointer	
Unit 6	Structures	5 lectures
	• What is structure? • What is the use of structures? • Creating structure • Introduction to Union Experiential Learning :Programming Quiz	1 Lecture

Reference books:

1. Let us C By Yashwant Kanitkar
2. Programming In C: A Practical Approach By Ajay Mittal

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Subject 3 (Practical)
Course Code : 24CsAniU2302
Course Name : Lab Course on 24CsAniU2301 (C Programming)

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Practical Topics:

Practical 1	Write a 'C' program to accept dimensions of cylinder and calculate & print surface area and volume
Practical 2	Write a 'C' program to find the factorial of a number.
Practical 3	Write a 'C' program to accept temperature in Fahrenheit and calculate & print it in Celsius and Kelvin.
Practical 4	Write a 'C' program using recursion to find the sum of digits of a number. Write a 'C' program to Accept initial velocity u, acceleration a and time t, calculate & print final velocity v and distance s traveled.
Practical 5	Write a 'C' program to accept two numbers and calculate & print arithmetic mean and harmonic mean.
Practical 6	Write a 'C' program from the user to accept two matrices and print the sum of matrices
Practical 7	Write a 'C' program to accept three dimensions, length L, Breadth B, and height H of cuboid and calculate & print surface area and volume.
Practical 8	Write a 'C' program to accept the matrix and find the transpose of the matrix

Practical 9	Write a ‘C’ program to accept character from a keyboard and display it’s previous and next character in order.
Practical 10	Write a ‘C’ program to find the sum of all elements of a matrix.
Practical 11	Write a ‘C’ program to accept an integer and check if it is even or odd.
Practical 12	Write a ‘C’ program to accept the ‘n’ students information (roll no, name, marks1, marks2, marks3) and display the students information in the format (roll no, name, marks1, marks2, marks3, total, percentage). Use structure
Practical 13	Write a ‘C’ program to accept 3 numbers and check whether the first is between the other two.
Practical 14	1. Write a ‘C’ program to display the following pattern for ‘n’ rows [25 Marks] 1 12 123 1234
Practical 15	Write a ‘C’ program to accept a number and check if it is divisible by 5 and 7.

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Open Elective (OE)

Course Code : 24CsAniU2401

Course Name : Lab Course on Calligraphy & Typography

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Basic drawing skill
- Creative Visualization

Course Objectives:

- Define Calligraphic and typographic aspects

Course Outcomes:

On completion of the course, student will be able to

- To develop the skill & knowledge of Calligraphy and typography.
- Students will be able to create Creative projects.

Practical Topics:

Practical 1	Calligraphy Concepts
Practical 2	Stroke styles
Practical 3	Calligraphic techniques
Practical 4	Elements of Typography
Practical 5	Typeface (Font)
Practical 6	Typography aspects
Practical 7	Font Family
Practical 8	Paragraph Formatting

Practical 9	Text Aesthetics
Practical 10	Text effects
Practical 11	Laws of typography
Practical 12	Digital Calligraphic techniques
Practical 13	Designing Artwork with Calligraphy
Practical 14	Designing Artwork with Typography
Practical 15	Creating one's own calligraphy/font

Progressive Education Society's

Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 5

Skill Education System (SEC)

Course Code : 24CsAniU2601

Course Name : Lab Course on Introduction to 3D Design

Teaching Scheme: TH: 4 Hours Practical/Week **Credit: 02**

Examination Scheme: CIA: 20 Marks **End-Sem:** 30 Marks

Prerequisite Courses:

- Basic drawing skill, visual storytelling and concept of moving images should be known.
- Knowledge of basic Computer hardware & software is also necessary.
- Basic Knowledge of cel & 2D Animation

Course Objectives:

- Define Computer-based Animation
- 2D Splines, Shapes & compound object
- 3D Modeling
- Lighting & Camera
- Texturing
- Rendering with M-Ray

Course Outcomes:

On completion of the course, student will be able to

- To develop the skill & knowledge in 3D Modeling.
- Students will understand the knowhow and can function either as an entrepreneur or can take up jobs in the multimedia and animation industry, video studios, edit set-up and other Special Effects sectors

Course Contents

Practical Topics:

Practical 1	Create Basic 3D Model Chair and Table
Practical 2	Create a sofa using extended primitives

Practical 3	Create a chess board using modifiers
Practical 4	Create a Gramophone
Practical 5	Make a table with a computer on it.
Practical 6	Make a Textured Perfume Bottle
Practical 7	Create a Bicycle
Practical 8	Create a TV Cabinet
Practical 9	Model 3D bike using reference Images
Practical 10	Create a 3D Concept car with Car interior, Wheels and front, rear Lights
Practical 11	Create a 3D House using proper plan and references
Practical 12	Model Exterior of 4 Storey Building with proper floor plan
Practical 13	Render the Interior Scene using Vray lights and render settings
Practical 14	Render the Exterior Scene using Vray lights and render settings
Practical 15	Create a 3D Cartoon Character