

**MAHATMA GANDHI UNIVERSITY
KOTTAYAM**



B.VOC. DEGREE PROGRAMME

IN

ANIMATION AND GRAPHIC DESIGN

REGULATION, SCHEME AND SYLLABUS

(2014 ADMISSION ONWARDS)

SCHEME AND SYLLABUS FOR B.VOC. ANIMATION AND GRAPHIC DESIGN

(To be introduced from 2014 admissions)

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF (National skill Qualifications framework). The B.Voc. programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles along with broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.

The proposed vocational programme in Animation and Graphic Design will be a judicious mix of skills, professional education related to Animation and Graphic Design and also appropriate content of general education. It is designed with the objective of equipping the students to cope with the emerging trends and challenges in the field of Animation and Graphic Design.

ELIGIBILITY FOR ADMISSION

A pass in Plus Two or equivalent examination or an examination recognized as equivalent thereto by this University.

CURRICULUM

The curriculum in each of the years of the programme would be a suitable mix of general education and skill development components.

DURATION

The duration of the B. Voc. Animation and Graphic Design shall be three years consisting of six semesters. The duration of each semester shall be five months inclusive of the days of examinations. There shall be at least 90 working days in a semester.

ELIGIBILITY FOR HIGHER STUDIES

Those who pass B.Voc. Animation and Graphic Design Degree are eligible for admission to higher studies. While applying for higher studies, B. Voc. (Animation and Graphic Design) is considered equivalent to B.A. Animation and Graphic Design of M.G. University.

PROGRAMME STRUCTURE

The B.Voc. Animation and Graphic Design shall include:

- General Education Components
- Skill Components
- Project
- Internship
- Soft Skills and Personality Development Programmes

CREDIT CALCULATION

The following formula is used for conversion of time into credit hours.

- One Credit would mean equivalent of 15 periods of 60 minutes each, for theory, workshops/labs and tutorials;
- For internship/field work, the credit weightage for equivalent hours shall be 50% of that for lectures/workshops;

COURSE STRUCTURE

NSQF Level	Skill Component Credits	General Component Credits	Normal Duration	Exit Points / Awards
Year 3	36	24	Six Semesters	B. Voc.
Year 2	36	24	Four Semesters	Advanced Diploma
Year 1	36	24	Two Semesters	Diploma

As per the UGC guidelines, there are multiple exit points for a candidate admitted in this course. If he/she is completing all the six credits successfully, he/she will get B. Voc. Degree in Animation and Graphic Design. If he/she is completing the first four semesters successfully, he/she will get an Advanced Diploma in Animation and Graphic Design. If he/she is completing the first two semesters successfully, he/she will get a Diploma in Animation and Graphic Design. Animation and Graphic Design B.Voc. Degree holder is expected to acquire the skills needed for an Animation and Graphic Designer.

PROGRAMME STRUCTURE

Semester - I					
Sl. No.	Course Code	Title	GC/SC	Hrs/Week	Credits
1	AGDG101	Listening and Speaking Skills in English	GC	4	5
2	AGDG102	Fundamentals of Computers	GC	4	5
3	AGDG103	Basics of Drawing(AOC)	GC	4	5
4	AGDS104	Elements of Visual Design (AOC)	SC	4	5
5	AGDS105	Raster and Vector Graphics (AOC)	SC	5	5
6	AGDS106	Graphic Design Lab	SC	4	5

Semester - II					
Sl.No.	Course Code	Title	GC/SC	Hrs/Week	Credits
1	AGDG201	Writing and Presentation Skills in English	GC	5	5
2	AGDG202	Media Organization	GC	5	5
3	AGDS203	HTML & Web Technologies (AOC)	SC	5	5
4	AGDS204	Publication Design (AOC)	SC	5	5
5	AGDS205	Web Design Lab (AOC)	SC	5	5
6	AGDS206	Internship - I	SC		5

Semester - III					
Sl. No.	Course Code	Title	GC/SC	Hrs/Week	Credits
1	AGDG301	Fundamentals of Animation (T)	GC	4	5
2	AGDG302	Digital Photography (AOC)	GC	4	5
3	AGDG303	Drawing for Animation - I (AOC)	SC	4	5
4	AGDS304	Drawing for Animation - II (AOC)	SC	4	5
5	AGDS305	Script Writing And Storyboarding For Animation (AOC)	SC	5	5
6	AGDS306	BG Design For Cel Animation (AOC)	SC	4	5

Semester - IV					
Sl. No.	Course Code	Title	GC/SC	Hrs/Week	Credits
1	AGDG401	Animation Techniques (AOC)	GC	5	5
2	AGDG402	Cel Animation - I (AOC)	GC	5	5
3	AGDS403	Cel Animation - II (AOC)	SC	5	5
4	AGDS404	Digital 2D Animation (AOC)	SC	5	5
5	AGDS405	Project - Animation Project	SC	5	5
6	AGDS406	Internship - II	SC		5

Semester - V					
Sl. No.	Course Code	Title	GC/SC	Hrs/Week	Credits
1	AGDG501	Media Ethics and Education	GC	4	5
2	AGDG502	Elements of 3D Animation (AOC)	SC	4	5
3	AGDS503	BG and Props Modelling (AOC)	SC	4	5
4	AGDS504	Character Modelling (AOC)	SC	4	5
5	AGDS505	Texturing and Rigging (AOC)	SC	5	5
6	AGDG506	Character Animation (AOC)	SC	4	5

Semester – VI					
Sl. No.	Course Code	Title	GC/SC	Hrs/Week	Credits
1	AGDG601	Soft Skills And Personality Development	GC	5	5
2	AGDS602	Lighting and Rendering (AOC)	SC	5	5
3	AGDS603	Visual Effects And Compositing (AOC)	SC	5	5
4	AGDS604	Audio And Video Editing Principles (AOC)	SC	5	5
5	AGDS605	Project – 3D Animation Project	SC	5	5
6	AGDS606	Internship - III	SC		5

GC – General Component

SC – Skill Component

ATTENDANCE

The minimum number of hours of lectures, tutorials, seminars or practical which a student shall be required to attend for eligibility to appear at the end semester examination shall not be less than 75 per cent of the total number of lectures, tutorials, seminars or practical sessions. Internships, study tours and soft skill and personality development programmes are part of the course and students must attend in these activities to complete a semester.

EVALUATION AND GRADING

The evaluation of each course shall contain two parts:

- (i) Internal or In-Semester Assessment (ISA)
- (ii) External or End-Semester Assessment (ESA)

The ISA and ESA ratio shall be 1:4 for theory and practicals. There shall be a maximum of 80 marks for ESA and maximum of 20 marks for ISA.

CRITERIA FOR GRADING

For all courses (theory & practical), grades are given on a 07-point scale based on the total percentage of marks. (ISA+ESA) as given below

Percentage of Marks	Grade		Grade Point
90 and above	A+	Outstanding	10
80-89	A	Excellent	9
70-79	B	Very Good	8
60-69	C	Good	7
50-59	D	Satisfactory	6
40-49	E	Adequate	5
Below 40	F	Failure	4

Note1: Decimal are to be rounded to the next whole number

CREDIT POINT AND CREDIT POINT AVERAGE

Credit Point (CP) of a course is calculated using the formula

$$CP = C \times GP, \text{ where } C = \text{Credit}; GP = \text{Grade point}$$

Credit Point Average (CPA) of a Semester/Programme is calculated using the formula

$$CPA = TCP/TC, \text{ where } TCP = \text{Total Credit Point}; TC = \text{Total Credit}$$

Grades for the different semesters and overall programme are given based on the corresponding CPA as shown below:

CPA	Grade	
Above 9	A+	Outstanding
Above 8, but below or equal to 9	A	Excellent
Above 7, but below or equal to 8	B	Very Good
Above 6, but below or equal to 7	C	Good
Above 5, but below or equal to 6	D	Satisfactory
Above 4, but below or equal to 5	E	Adequate
4 or below	F	Failure

Note 2: A separate minimum of 30% marks each for internal and external (for both theory and practical) and aggregate minimum of 40% are required for a pass for a course. For a pass in a programme, a separate minimum of Grade E is required for all the individual courses. If a candidate secures F Grade for any one of the courses offered in a Semester/Programme only F Grade will be awarded for that Semester/Programme until he/she improves this to E Grade or above within the permitted period. Candidate who secures E Grade and above will be eligible for higher studies.

CONTINUOUS EVALUATION (CE)

All records of Continuous Evaluation shall be kept in the Department and shall be made available for verification by the University, if and when necessary

MARKS DISTRIBUTION FOR EXTERNAL EXAMINATION AND CONTINUOUS EVALUATION

The external examination of all semesters shall be conducted by the University at the end of each semester. Internal evaluation is to be done by continuous assessment.

- a) Marks of External Examination (Theory / Practical / Project) : 80
- b) Marks of Internal Evaluation (Theory / Practical / Project) : 20

- **Components of Internal Evaluation - Theory**

All the three components of the internal assessment are mandatory. For the course English in I & II Semesters, internal oral examination shall be conducted instead of one test paper.

Components of Internal Evaluation - Theory	Marks
Attendance	5
Assignment /Seminar/Viva	5
Test paper(s) (1 or 2) (1×10 =10; 2×5 =10)	10
Total	20

Attendance:

The allotment of marks for attendance shall be as follows:

Attendance Percentage	Marks
Less than 75 %	1 Mark
75 % & less than 80%	2 Marks
80% & less than 85%	3 Marks
85% & less than 90%	4 Marks
90% & above	5 Marks

Assignment:

Assignments are to be done from 1st to 4th Semesters. At least one assignment should be done in each semester.

Seminar/Viva:

A student shall present a seminar in the 5th semester and appear for Viva-voce in the 6th semester.

Internal Assessment Test Papers

At least one internal test-paper is to be attended in each semester for each course. The evaluations of all components are to be published and are to be acknowledged by the candidates. All documents of internal assessments are to be kept in the college for two years and shall be made available for verification by the University. The responsibility of evaluating the internal assessment is vested on the teacher(s), who teach the course.

- Components of Internal Evaluation – Practical**

Components of Internal Evaluation – Practical	Marks
Attendance	5
Record	5
Test	5
Performance, Punctuality and Skill	5
Total	20

END SEMESTER EVALUATION (ESE):

End Semester Evaluation of all the Courses in all the semesters shall be conducted by the University. The results of the ESE shall be arranged to be published according to the Examination Calendar prescribed by the University.

PATTERN OF QUESTIONS FOR EXTERNAL EXAMINATION – THEORY PAPER

Question Type	Total no. of questions	Number of questions to be answered	Marks of each question	Total marks
Very short answer type (One word to maximum of one sentence)	10	10	1	10
Short answer (Not to exceed 60 words)	12	8	2	16
Short essay (Not to exceed 120 words)	9	6	4	24
Long essay	4	2	15	30
TOTAL	35	26		80

PATTERN OF EVALUATION FOR EXTERNAL EXAMINATION – PRACTICAL / INTERNSHIP WITH PROJECT

The components of End Semester Examination of Practical/Internship /Project have to be set by the Chairman, Boards of Studies, concerned.

Note 3: Students having a minimum of 75% average attendance for all the courses only can register for the examination. Condonation of shortage of attendance to a maximum of 10 days or 50 hours in a semester subject to a maximum of two times during the whole period of the programme may be granted by the University on valid grounds. This condonation shall not be counted for internal assessment.

Benefit of attendance may be granted to students attending University/College union/Co-curricular activities by treating them as present for the days of absence, on production of participation/attendance certificates, within one week, from competent authorities and endorsed by the Head of the institution. This is limited to a maximum of 10 days per semester and this benefit shall be considered for internal assessment also. Those students who are not eligible even with condonation of shortage of attendance shall repeat the course along with the next batch.

GRIEVANCE REDRESSAL MECHANISM

Internal assessment shall not be used as a tool for personal or other type of vengeance. A student has all rights to know, how the teacher arrived at the marks. In order to address the grievance of students a three-level Grievance Redressal mechanism is envisaged. A student can approach the upper level only if grievance is not addressed at the lower level.

Level 1:Dept. Level: The department cell chaired by the Head, Dept. Coordinator and teacher in-charge as members.

Level 2: College level: A committee with the Principal as Chairman, Dept. Coordinator, HOD of concerned Department and a senior teacher nominated by the College council as members.

Level 3: University Level: A Committee constituted by the Vice-Chancellor as Chairman, Pro-Vice-Chancellor, Convener - Syndicate sub-committee on Students Discipline and Welfare, Chairman- Board of Examinations as members and the Controller of Examination as member-secretary.

B.Voc. in Animation and Graphic Design

Detailed Syllabus

SEMESTER – I

AGDGI01 : LISTENING AND SPEAKING SKILLS IN ENGLISH

Objectives: To introduce the students to the speech sounds of English in order to enable them to listen to English and speak with global intelligibility. To enable the students to speak English confidently and effectively in a wide variety of situations. To help the students to improve their reading efficiency by refining their reading strategies.

MODULE – I

Speech Sounds: Phonemic symbols – Vowels – Consonants – Syllables – Word stress – Stress in polysyllabic words – Stress in words used as different parts of speech – Sentence stress – Weak forms and strong forms – Intonation

MODULE – II

Accents: Awareness of different accents: American, British and Indian – Influence of the mother tongue.

MODULE – III

Listening: Active listening – Barriers to listening – Listening and note taking – Listening to announcements – Listening to news on the radio and television.

MODULE – IV

Speaking: Word stress and rhythm – Pauses and sense groups – Falling and rising tones – Fluency and pace of delivery – Art of small talk – Participating in conversations – Making a short formal speech – Describing people, place, events and things – Group discussion skills and telephone skills.

MODULE – V

Reading: Theory and Practice – Scanning – Surveying a textbook using an index – reading with a purpose – Making predictions – Understanding text structure – Locating main points – Making inferences – Reading graphics – Reading critically – Reading for research.

Books for Reference

V.Sasikumar, P KiranmaiDutt and GeethaRajeevan, *.Communication Skills in English.* Cambridge University Press and Mahatma Gandhi University.

FURTHER READING

1. *A Course in Listening and Speaking I & II*, Sasikumar, V.,KiranmaiDutt and GeethaRajeevan, New Delhi: CUP, 2007
2. *Study Listening: A Course in Listening to Lectures and Note-taking* Tony Lynch New Delhi: CUP,

3. *Study Speaking: A Course in Spoken English for Academic Purposes*. Anderson, Kenneth, Joan New Delhi: OUP, 2008
4. *Study Reading: A Course in Reading Skills for Academic Purposes*, Glendinning, Eric H. and Beverly Holmstrom New Delhi: CUP, 2008
5. *Communication Studies*. Sky Massan Palgrave, Macmillan. *Effective Communication for Arts and Humanities Students* Joan Van Emden and Lucinda Becker Palgrave Macmillan
6. *Effective Communication for Arts and Humanities Students* Joan Van Emden and Lucinda Becker Palgrave Macmillan.

SEMESTER – I

AGDG102: FUNDAMENTALS OF COMPUTERS

Objectives: To achieve a thorough understanding about a computer system Internet.

Module – I

Introduction: Parts of Computer System- Hardware, Software, Data, Users, Different types of computers, Characteristics of computers, Computer Languages - Machine, Assembly Language and Higher Level languages - 3GL, 4GL, 5GL.

Module – II

Interacting with Computers: Input/Output devices: Printers: Dot matrix, Inkjet, Laser , Keyboards-switches, working, connectors/interfaces, Pointing and positioning devices – types, construction & working, wireless input devices, Digital camera, Scanner-types, Monitor - types.

Module – III

Data Processing: Representation of data, processing of data - The CPU, Memory-different types of RAM and ROM, Factors affecting speed.

Module – IV

Storing Information in a Computer: Types of Storage Devices - Magnetic Storage Devices Data storage and organization on a Magnetic Disk, Finding data on a disk -Diskettes - Hard Disks- Tape drives- Optical Storage devices ,Solid state storage devices.

Module – V

Internet: Introduction to World Wide Web, Internet operations, Introduction to Electronic Commerce and Electronic Business.

Books for Reference

1. Peter Norton's Introduction to Computers, Sixth Edition, Published by Tata McGraw Hill
2. Computer Fundamentals By P K Sinha & Priti Sinha Fourth Edition.
3. Introduction to Computer Science, IITL Education Solutions limited.

SEMESTER – I

AGDG103: BASICS OF DRAWING (AOC)

Objectives: This course is intended to provide the student a basic understanding of drawing techniques. Students develop a basic skill in drawing through various exercises. This course also helps the students to have an idea about the history of art in general.

MODULE – I

A Brief History Of Art and Drawing: – Cavemen, Classical Art, Renaissance, Modern Art Etc.

MODULE – II

Introduction Of Different Drawing Materials And Tools - Dry Media – (Pencils, Charcoals, Chalks, Crayons – Pastels, Erasers, Smudging Tools) - Wet Media – (Dip Pens, Disposable And Cartridge Pens) – Markers – Brushes – Inks (Water Based, Alcohol Based, Indian/Chinese Ink) – Paints (Water Based, Acrylic, Oil)

MODULE – III

Drawing Surfaces – (Papers – Newsprint – Vellum - Bristol Board - Rag/Cotton Paper - Watercolor Paper - Charcoal Paper - Colored Paper - Rice Paper – How To Handle These Papers) - Other Drawing Surfaces – (Scratchboards) - Tools For Erasing And Sharpening – Palettes – Knives- Easels .

MODULE– IV

Drawing Lines, Circles, Ovals, Scribbles, Patterns Etc. - Drawing From Observation, Doodling And Noodling – Drawing Straight Lines –Free Hand Drawing – Holding The Pencil – Angle And Direction Of Lines - Shapes And Forms – Drawing With Grids

MODULE – V

Basic Elements And Principles In Picture Composition – Line – Color – Value – Shape – Form –Space – Texture – Balance – Emphasis – Contrast – Rhythm And Movement – Pattern And Repetition – Unity – Variety – Proportion - Basic Geometric Shapes And Forms - Compositional Techniques - Rule Of Thirds - Rule Of Odds - Rule Of Space – Simplification.

Books for Reference

1. Social History Of Art : Arnold Hauser
2. Encyclopaedia Of World Art (Vol.I&II): Mcgraw Hill Publication
3. The Art Of Pictorial Composition : Wolehonok
4. Exploring The Elements Of Design : Mark A. Thomas, Poppy Evans
5. The Art Of Composition : Michael Jacobs
6. The Art Of Pictorial Composition : Wolehonok
7. Complete Books Of Artist Techniques : Dr. Kurt Herbers
8. Drawing For The Absolute And Utter Beginner: Claire Watson Garcia

SEMESTER – I

AGDS104: ELEMENTS OF VISUAL DESIGN (AOC)

Objectives: The objective of this course is to introduce the elements and basic principles of visual design. The elements form the 'vocabulary' of the design, while the principles constitute the broader structural aspects of its composition.

MODULE – I

Introduction To Basic Elements Of Visual Design: **Line**– Line Direction And Meanings-Quality Of Lines-Implied Lines And Line Of Force, **Shape**- Organic Shape And Geometric Shapes-Non Representational Shape And Representational Shape, **Forms**-Relationship With 2d Shape And 3d Forms, **Space** –Negative Space And Positive Space-Figure/Ground Relation, **Colour**-Subtractive And Additive Colour-Primary, Secondary In Both Modes- Colour Wheel-What Is Hue, Saturation And Value- What Is Shade, Tint And Tones-Colour Schemes – Monochromatic, Analogous, Complementary, Split Complementary, Triadic Colour, Double Complementary Etc-Colour Meaning In Various Context Such As Culture, Religion, Gender And Emotional Factor, **Texture** – Visual Texture And Tactile Texture, Texture And Light Value, **Pattern**

MODULE – II

Typography - Typeface, Typeface Family, Font, Anatomy Of Type, Typographic Measurement – Point And Pica, Text Type And Display Type, Classification Of Type - Old Style, Transitional Period, Modern, Slab Serif, Sans Serif, Script, Decorative Etc. Selection Of A Type Face In Design-Clarity: Readability And Legibility, Integration With Visuals, Concept And Theme Etc

MODULE – III

Basic Principles Of Design: Balance, Proportion, Rhythm, Emphasis, Unity Etc. Laws Of Perceptual Action: Similarity, Proximity, Continuity, Closure Etc. Scale And Proportion In Design-Mathematical Ratios And Proportional Systems: Fibonacci Numbers, Golden Ratio.

MODULE– IV

Exercises On Visual Composition And Layout. The Use Of Grids In Graphics Composition. Concepts Of Visual Design, Visual Structure And Visual Interest, Visual Analysis And Refinement Of Visual Representations.

MODULE– V

Problem Solving- Tessellation Exercise With Various Shapes And Colour Schemes, Logo Design, Poster Design Projects

Books for Reference

1. Exploring The Elements Of Design : Poppy Evans, Mark A Thomas
2. Graphic Design Solutions: Robin Landa
3. The Fundamentals Of Typography: Ambrose, Harris

4. Colour Management: John T Draw, Sarah A M

SEMESTER – I

AGDS105: RASTER AND VECTOR GRAPHICS (AOC)

Objectives: This course introduces students to imaging softwares –The basic tools and techniques are learned through a series of practical assignments.

MODULE – I

Introduction To Raster Images – Image Resolution – RGB, CMYK, Lab And Other Colour Modes / Channels And Their Applications –Colour Palette And Swatches .Basic Drawing– Using Airbrush, Pencil, Paint Brush Tools. Concept Of Layers – Transparency And Blending Modes – Creative Use Of Layers And Blending Modes, Layer Mask. Selection Tools-Path Options And Selection-Alpha Channel, Type Tool And Its Properties. Concept OfGIF Animation, Image Compression: LossyAnd Lossless Compression Formats

MODULE – II

Photo Restoration Technique- Clone Tool, Patch Tool, Sponge Tool, Burn Tool, Dodge Tool Etc. Adjusting Hue Saturation And Value, Use Of Levels And Curves, Use Of Colour Histogram, Treatment Of RAW Files, HDR Toning.

MODULE – III

Introduction To Vector Graphic-What Is Vector, Properties Of Vector Graphics - Stroke And Fill Tools – Basic Shapes, Bezier Drawing With The Pen Tool - CreativeUse Of Shapes – Using The Pathfinder – Boolean Operations Using Shapes - Concept Of 3D Shapes. Vector Drawing Techniques – Node Editing – Tracing From Raster Images – Different Styles Of Vector Illustrations. Using Colour In Vector Graphics – Different Colour Palettes – Gradients And Gradient Mesh.

MODULE – IV

Using Type Tools And Type Controls – Type Along A Path –Concept Of Alignment And Text Flow Options, Filters And Effects.

MODULE – V

A Design Project Based On Combination Of Raster And Vector Softwares.

REFERENCE

1. Adobe Photoshop Classroom In A Book:Adobe Creative Team
2. Adobe Illustrator Classroom In A Book:Adobe Creative Team
3. Beyond Photoshop: Derek Lea
4. Adobe Digital Imaging How-Tos: Dan Moughamian
5. Crafting Digital Media :Daniel James
6. GIMP Essential Reference:Alex Harfor
7. Inkscape Guide To A Vector Drawing Program: Tavmjong Bah

SEMESTER – I

AGDS106: GRAPHIC DESIGN LAB

Objectives: This course is mentioned for digital designing of print and digital media. Students will explore various techniques for image manipulation, effective colour correction and various illustrating and design skills.

MODULE – I

Design Basics: Measurements-Absolute And Relative. Standard Sizes: Paper Sizes-Book And Poster Sizes-Screen Sizes Etc. Page Layout: Working Of A Grid System- Column, Margin, Gutter Spaces, Bleed, Registration And Trim. Paper: Paper Qualities, Paper Types And Print Quality. Binding/Folding: Type Of Binding, Type Of Fold.

MODULE – II

Design Based On Raster Graphics: Poster Design, Advertisement Design, Typographically Prominent Designs, DesignBook Cover-Understanding Spine, Flap Etc. Design For A Firm: Envelope - Letterhead-Visiting Cards Etc. Design Brochure: Various Type Of Folding

MODULE – III

Image Restoration And Correction: Image Restoration With Restoration Tools And Correction With Blending Options, Colour Correction-Variou Colour Modes: RGB, CMYK, GrayEtc-Changing One Mode To Another-Working With Bits/Channel –Understanding Gray Scale, Monotone, Duotone, Triton, Quadtone Etc. Working With Lab Colour Mode. Levels, Curves, HDR Toning, Working With Digital Negative OrRAW File Etc.

MODULE– IV

Designs Based On Vector Graphics: Logo And Corporate Identity Design, Symbols Or Icons Designs For Various Environments Like Schools, Forest, Factory Etc. Digital Illustrations: Botanical Illustration, Scientific Illustrations, Character Illustration Etc.

MODULE – V

DesignProject – Corporate Style Guide, Information Design Etc

Books for Reference

1. The Production Manual: AmbroseHarris
2. Design Elements, A Graphical Style Manual: Timothy Samara

SEMESTER – II

AGDG201: WRITING AND PRESENTATION SKILLS IN ENGLISH

Objectives: To make the students aware of the fundamental concepts of critical reasoning and to enable them to read and respond critically, drawing conclusions, generalizing, differentiating fact from opinion and creating their own arguments. To assist the students in developing appropriate and impressive writing styles for various contexts. To help students rectify structural imperfections and to edit what they have written. To equip students for making academic presentations effectively and impressively.

MODULE – I

Critical Thinking: Introduction to critical thinking – Benefits - Barriers – Reasoning - Arguments - Deductive and inductive arguments – Fallacies - Inferential comprehension- Critical thinking in academic writing - Clarity - Accuracy – Precision – Relevance.

MODULE – II

Research for Academic Writing and the Writing Process: Data collection - Use of print, electronic sources and digital sources - Selecting key points - Note making, paraphrasing, summary – Documentation - Plagiarism – Title – Body paragraphs - Introduction and conclusion – Revising - Proof-reading.

MODULE – III

Accuracy in Academic Writing: Articles - Nouns and prepositions - Subject-verb agreement - Phrasal verbs - Modals - Tenses - Condition-als – Prefixes and suffixes – Prepositions - Adverbs – Relative pronouns - Passives - Conjunctions - Em-bedded questions - Punctuation – Abbreviations.

MODULE – IV

Writing Models: Letters - Letters to the editor - Resume and covering letters - e-mail - Seminar papers - Project reports - Notices - Filling application forms - Minutes, agenda – Essays.

MODULE – V

Presentation Skills: Soft skills for academic presentations - Effective communication skills – Structuring the presentation - Choosing appropriate medium – Flip charts – OHP – Power Point presentation – Clarity and brevity - Inter-action and persuasion - Interview skills – Group Discussions.

Books for Reference:

Marilyn Anderson, Pramod K Nayar and Madhucchandra Sen. *Critical Thinking, Academic Writing and Presentation Skills*. Pearson Education and Mahatma Gandhi University.

SEMESTER – II

AGDG202: MEDIA ORGANIZATION

Objectives: To make the students aware of the nature and structure of different types of media organizations, media organization's behavior, relationship between suppliers and buyers and the economics of the media organization.

MODULE – I

Media Organization and Design: Some Conceptual Issues. Media as Business and Social Institution. Media entrepreneurship, Greiner's Development Model of a company.

MODULE – II

Behavior in media Organization and Organizational Behavior. Nature and Structure of different Media Organizations-AIR/DD, Private Satellite Channels, Production Houses, employment opportunities in Indian Media industry, Group Behavior, Innovation and Creativity, Culture of organization.

MODULE – III

Economics of Media-Relationship between supplier and buyer, Leisure time activity, Cost Factors, Revenue Models, Market Factors, State of the Industry today.

MODULE – IV

Project Management in Media-Production Project Cycle (PPC), Management themes in production Process, Project Planning, Production Strategies, PPC in Practice-Initiation (Ideas, Evaluation and Assessment), Risk and Impact Assessment, Pre-production, Production Team, Project Specification, Project work plan, Sources of Funds, Budgeting (tools etc.) Project Responsibility, Production Process (status Report, Assessment, Negotiation, Completion, Follow-up).

MODULE – V

Programming Strategies, Audience Rating-Analyzing Programming and Audience Trends Marketing Programs and selling space and time. Different kinds of contracts and legal arrangements, Project Management.

Books for Reference:

1. Block et al. Managing in the Media. Focal Press, 2001
2. Media organisation and production, Simon Cottles

SEMESTER – II

AGDS203: HTML & WEB TECHNOLOGIES (AOC)

Objectives: Students are introduced to web designing techniques and technologies as they learn how to create basic web project and also gives students an understanding of how the study of human-computer interaction affects the design of interactive systems.

MODULE – I

Study Of Interactive Media – Growth And Development. Principles Of Interaction Design – Anticipation, Consistency, Metaphors, Accessibility, Typography, Navigation. Study Of Web-Based Interfaces, Interface Elements – Text, Page Elements, And Navigational Components. Formatting Using Style Sheets. Contemporary Trends InUI Design

MODULE – II

Introduction To Web Design .Basic Of HTML Tags, Dream Weaver, Cretin A Basic Webpage.Attributes, List And Tables Links And Images, CSS Introduction.

MODULE – III

CSS – Selector Type, Values, Common Properties, Webpages Layout Techniques, Creating Website WithDream Weaver.

MODULE– IV

Introduction ToFlash, Panels, Timeline, Symbols, Libraries, Animation, Flash Headers And Banners.

MODULE – V

Web Design Project

Books for Reference

1. Principles of Web: Sklar Joel
2. Designing Interactions: Bill Moggridge
3. The Design of Sites: Douglas Van Duyne

SEMESTER – II

AGDS204: PUBLICATION DESIGN (AOC)

Objectives: This course examines the graphic designer's role in the layout and design of publications. Lectures and studio work cover historical and current practices and technologies used to produce multi-page publications. Students create visualization for several publications using the design elements and art skills.

MODULE – I

Layout Design: Directing The Eye, Backwards Movement, Application Of Design Principles In Lay Out, Free Style Lay Out, Grid Design, Formats, Margins, Columns And Gutters, Page Depth, Working With Imagery, Borders And Rules.Consistency In Design: Creating Style Guides And Printing Instructions.

MODULE – II

Magazine Design: Creating A Suitable Grid, Title And Cover Policies, Visualization In Magazine Design, Basic Magazine Terminology, Redesigning A Magazine, Essentials Of Page Design,

MODULE – III

News Paper Design: The Main Elements Of Print Layout, Formats And Grids, Selecting And Using Type, White Space, Colour, Headlines, The Masthead, Laying Out Pages, The Modular And Mini Column Formats, Designing Front Page And Inner Pages.

MODULE– IV

Book Design: Effective Grid Design For The Book, Typography, Margins In Page Design, Laying Out Text And Images.

MODULE – V

Electronic Publishing: Interactive PDF And Other E-Pub Formats, Interaction Between Movies, Sound Clips URL's And Other E-Books, E-Publication For Various Platforms.

Books for Reference

1. The Big Book of Layouts: David E. Carter
2. Layout Essentials -100 Design Principles for Using Grids: Beth Tondreau
3. Best of Newspaper Design: Society of News Design
4. Designing for Newspapers and Magazines: Chris Frost
5. Layout Workbook: Kristin Cullen
6. Designing Books: Practice and Theory: JostHochuli and Robin Kinross
7. Building Your Book for Kindle : Kindle Direct Publishing
8. The Intellectual Foundation of Information Organization (Digital Libraries and Electronic Publishing):Elaine Svenonius

SEMESTER – II

AGDS205: WEB DESIGN LAB (AOC)

Objectives: This course introduces students to basic programming concepts allowing them to explore and experiment with code to control visual and interactive elements.

MODULE – I

Introducing Flash Actionscript– ActionscriptFundamentals – Syntax – Data Types – Variables – Conditionals – Loops – Arrays – Objects, Movieclips – Custom Objects – Functions – Properties – Methods – Introduction To OOP (Classes, Methods, Inheritance, Composition, Polymorphism, Encapsulation, Interfaces).

MODULE – II

Events – Event Listeners – Handling Events - The Display List – Time Line VsScripted Motion – Geometry, Trigonometry And Physics – Programmatic Tweening - Loading Dynamic Content.

MODULE – III

Action Script Applications – Websites – Games.

MODULE– IV

Introduction To Server Side Scripting – Apache Server – PHP – Language Elements – Integrating PHP In HTML Pages – Databases – MySQL – Creating Dynamic Web Pages – Integrated Web Development With PHP And MySQL – Content Management Systems.

MODULE – V

Web Design Project

Books for Reference

1. Essential ActionScript:Colin Moock
2. Processing: A programming Hand book for visual designers and artists: Casey Reas& Ben Fry

SEMESTER – II

AGDS206: INTERNSHIP – I

After the completion of the second semester, students will have to undergo a two weeks' internship programme in a professional design studio to understand various aspects in a design production atmosphere.

Students can choose a design studio in India or abroad for their internship. College will provide a certificate to prove their identity. A member of the faculty will supervise the student during their internship.

Studios having the following qualities can be chosen:

- a. A minimum of two years' experience in designing field
- b. Should have produced a minimum of three popular print designs for the last six months.

At the end of the internship, students should prepare a comprehensive report. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the organization. All the above details should be submitted to the Head of the Department for evaluation.

SEMESTER – III

AGDG301: FUNDAMENTALS OF ANIMATION (T)

Objectives: This course deals with the basic concepts, theories and principles used in animation, animation work flow, basic tools etc. This course helps the students to understand the Basic Techniques Of Motion Pictures also.

MODULE – I

Animation- Definition- Short History Of Animation - Persistence Of Vision – Early Animation Devices – Techniques Of Animation – Different Types Of Animation - Workflows Of Different Types Of Animation - Preproduction, Production And Post-Production Stages - Types Of Animation - Experimental Animations.

MODULE – II

Basic Principles Of Animation - Squash And Stretch, Anticipation, Staging, Straight Ahead And Pose To Pose Animation, Follow Through And Overlapping Action, Slow Out And Slow In, Arcs , Secondary Action, Timing, Exaggeration, Solid Drawing, Appeal.

MODULE – III

Animation Equipment – Peg Holes And Peg Bars – Cels - Light Box – Line/Pencil Tests - Field Charts - Rostrum Camera - The Exposure Sheet (X Sheet) – Concepts Of :- Soundtrack , Track Breakdown, Key Frames, In-Betweens, Clean-Up etc.

MODULE– IV

Camera Techniques – Types Of Shots - Basic Shots And Their Intermediary Shots - Camera Angles - Camera Movements - Dramatic Effects - Visual Continuity - Picture Composition - Compositional Techniques - Rule Of Thirds - Rule Of Odds - Rule Of Space – Simplification.

MODULE – V

Basics Of Television Transmission- Frames, Lines, Timing - UHF, VHF - Television Standards-PAL, NTSC, SECAM; Standards Conversion - Aspect Ratios - Interchanging Aspect Ratios - Safe Areas - Display Resolutions - File Formats - Image, Audio, Video; Compression – Audio, Video; Compression Ratio

Books for Reference

1. The History of Animation: Charles Solomon
2. The Animator's Survival Kit: Richard Williams
3. Disney Animation - The Illusion of Life: Frank Thomas and Ollie Johnston
4. Animation From Pencils To Pixels: Tony White
5. How to Make Animated Films : Tony White

SEMESTER – III

AGDG302: DIGITAL PHOTOGRAPHY (AOC)

Objectives: This course concentrates on techniques, aesthetics and communication in the photographic medium. Students learn the basics of digital photography through a series of assignments.

MODULE – I

Invention Of Photography - Camera ,Choosing A Camera, Lenses: Type Of Lenses, Focusing ,Focal Length, Aperture , Depth Of Field , Shutter Speeds, DSLR Camera, Image Sensor, ISO, Aspect Ratio, Full Frame, APS Sensors.

MODULE – II

Image Composition: Rules For Composition, Subject Placement, Balance, Line Of Force, Vantage Point, Depth Etc. Working With Tripod And Other Supporting Accessories.

MODULE – III

Light- What Is Light-Physics Of Light, Properties Of Light-Lighting Aesthetics, Colour Temperature, Direction, Quality Of Light Etc. Light Sources: Natural Light, Artificial Light- Hard And Soft Light,Key Light, Fill Light,Rim Light ,Front Lighting, Side Lighting, Three Point Lighting- Studio Lighting And Light Modifiers:-Flash Diffusers, Soft Boxes, Snoots, Ban Doors And Honeycombs, Gels And Filters.

MODULE– IV

Introduction ToStereo Photography: Stereoscopy And Illusion Of Depth, InteraxialAnd InterocularSeparation, Binocular Vison, Retinal Display And Parallax. Ortho-Stereo, Hyper-Stereo &Hypo-Stereo. 3D Cameras: Side By Side, Beam Splitter. Special Stereoscopy Lenses.

MODULE – V

Photographic Projects: Product Photography (Advertisement Photography), Photography For Stop Motion Animation.

Books for Reference

1. Photography, the art of composition: Bert Krages
2. Photographic lighting Simplified:Susan McCartney
3. Creative composition: Harold Davis
4. The 3d photography book:Jeffrey L. Cooper
5. Focal Encyclopaedia of Photography: Focal Press Team
6. 3D Storytelling: How Stereoscopic 3D Works and How to Use It :Bruce Block

SEMESTER – III

AGDS303: DRAWING FOR ANIMATION - I (AOC)

Objectives: Includes essential animation drawing techniques like sketching, perspective drawing etc. This course also deals with some of the pre-production stages like character designing, preparation of model sheets, blueprint creation and layout design.

MODULE – I

Memory And Imagination Drawing - Life Drawing – Use Of Basic Shapes And Forms – Sketching Poses - Rapid Sketching From Live Models - Attitude - Gestures - Line Drawing - Quick Sketches - Thumbnails - Stick Figures - Line Of Action – Balance – Rhythm – Positive And Negative Spaces - Silhouettes - Caricaturing Fundamentals - Exaggeration

MODULE – II

Perspective Drawing – Vanishing Points – Orthogonal Lines – Horizon – Eye Level – One Point Perspective – Two Point Perspective - Three Point Perspective – Multi- Point Perspective - Overlapping And Intersection Of Shapes In One Point, Two Point And Three Point Perspective Views - Objects And Shapes In Perspective With Light And Shade - Foreshortening

MODULE – III

Tones - Lighting And Shading – Basic 3-Dimensional Light Set Up – Several Types Of Shadows – Cast Shadow – Contact Shadow – Contour Shadow – Reflected Light – Overhang Shadow – Highlight – Core Shadow.

MODULE – IV

Visualization - Character Designing - Features Of A Character – Types/Kinds Of Characters – Designing Props And Assets Of Character – Creating Turn Arounds / Character Model Sheets – Blueprints - Character Size Comparison Charts – Character Attitude Poses

MODULE – V

Layout – Tools For A Layout Artist – Scale In Layout - Perspective Drawing In Layout – Lighting And Shading In Layout – Field Sizes – Planning Pan, Tilt, Rotation, Multiple Pans Etc. – Framing And Composing A Layout – Staging – Match Lines – Field Size Graticule - Field Size Set Up – Cut Off Guides - Concept Of Layers - Back Ground, Mid Ground, Foreground Elements - Character Interaction With The Scene And The Backgrounds

Books for Reference

1. Perspective Made Easy: Ernest R Norling
2. Perspective Drawing Handbook: Joseph D'Amelio
3. Layout And Composition For Animation: Ed Ghertner
4. Animation Background Layout: Mike S Flower
5. Drawing For Animation: Paul Wells
6. How To Draw What You See: Rudy De Reyna

7. How to Draw Animation - Learn the Art of Animation from Character Design to Storyboards and Layouts : Christopher Hart

SEMESTER – III

AGDS304: DRAWING FOR ANIMATION - II (AOC)

Objectives: This course concentrates on study and analysis of human and animal anatomy along with cartoon character designing.

MODULE – I

Human Anatomy – Anatomy Of Different Age Groups – Babies, Children, Teens, Young Adults, Aged - Basic Proportions – Basic Understanding Of The Skeletal And Muscle System – Human Forms In Perspective.

MODULE – II

Male And Female Anatomy - Body Structure, Proportion And Construction Of Body Parts, Torso, Face, Eyes, Nose, Ears, Mouth, Hand, Feet Etc.

MODULE – III

Anatomy Of Animals, Birds, Reptiles: Body Structure, Proportion And Construction Of Body Parts, Basic Forms, Understanding Motion And Grace, Face, Legs, Tails - Use Of Perspectives While Drawing Animals, Birds, Reptiles And Insects.

MODULE – IV

Cartoon Characters - Understanding Cartoon Characters - Cartoon Constructions – Character Development - Drawing From Basic Shapes - Distortion Of Proportions - Cartoon Faces, Eyes, Mouths, Hairs, Nose, Hands, Feet - Facial Expressions

MODULE – V

Types Of Characters In Classic Animated Cartoons – Cute – Screwball – Goofy – Heavy, Pugnacious – Humans, Animals, Birds, Reptiles Characters – Fairy Tale Characters – Gnomes – Elves – Dwarfs – Witches

Books for Reference

1. How To Draw What You See: Rudy De Reyna
2. Animal Anatomy For Artists: Eliot Goldfinger
3. Cartoon Animation : Preston Blair
4. Disney Animation - The Illusion of Life : Frank Thomas and Ollie Johnston
5. Figure Drawing Without a Model - Ron Tiner
6. How to Draw Animation - Learn the Art of Animation from Character Design to Storyboards and Layouts : Christopher Hart

SEMESTER – III

AGDS305: SCRIPT WRITING AND STORYBOARDING FOR ANIMATION (AOC)

Objectives: Includes pre-production stages like idea creation, story development, scripting, storyboarding etc.

MODULE – I

Developing Idea/ Concept - Story - Basic Elements Of A Story – Types Of Stories - Creating Story Ideas - Sources Of Story Line - Adaption - Character Roles - Characterization– Dialogues – Basic Structure Of A Story – Old And Modern Structures – Concept Of Acts –Theme – Subplots – Tone – Genre - Writing For Different Types And Groups Of Audience - AnimationScript – Shot – Scene – Sequence –Animation Script Vs. Live Action Movie Script - Screenplay Format – Elements Of Screenplay Format –Montage

MODULE – II

Story Board - Definition - Importance Of Story Board – Advantage - Different Types Of Story Boards - Story Board Formats

MODULE – III

Elements Of Storyboarding: - Design, Color, Light And Shadow, Perspective, Application Of Staging, Composition Rules - Concept Of Panels And Its Usages- Floor Plans - Storyboarding Movements

MODULE– IV

Illustrating Camera TechniquesIn A Story Board - Visual Continuity – Transitions - Digital Storyboarding

MODULE – V

Creation Of Animatic – Scanning Story Board Panels And Synchronizing It With The Sound Tracks.

Books for Reference

1. How to Draw Animation - Learn the Art of Animation from Character Design to Storyboards and Layouts : Christopher Hart
2. The Art of the Storyboard - Storyboarding for Film, TV, and Animation : John Hart
3. Exploring Storyboarding : Wendy Tumminello
4. Don Bluth's Art of Storyboard : Don Bluth
5. How To Write For Animation: Jeffrey Scott
6. Writing For Animation, Comics And Games: Christy Marx

SEMESTER – III

AGDS306: BG DESIGN FOR CEL ANIMATION (AOC)

Objectives: Strong emphasis is placed on the special training for drawing and painting of Cel Animation backgrounds.

MODULE – I

Painting With Opaque Mediums Like Water Color, Gouache, Poster Color, Acrylics Etc. - Painting Tools: - Different Kinds Of Brushes, Papers, Colors, Palettes Etc.

MODULE – II

Washes: - Plain/Flat, Graded, Wet In Wet, Dry Brush Etc. – Foundation Sketching Using Pencils, Brushes And Tonal Values – Color Wheel: - Primary, Secondary, Complementary, Warm / Cool Colors – Color Values – Color Harmony –Light And Shade – Reflected Light

MODULE – III

Elements Of Background Designing – Composition – Colours -Values -Painting The Mid-Tones - Adding The High Lights And Shadows - Perspective And Illusion Of Depth In B.G Drawing - Levels Of Detail - Different Mediums :- Water Colour ,Acrylic, Oil, Digital Etc.

MODULE– IV

BG Painting: - Trees, Mountains, Clouds, Water Bodies, Meadows, Buildings, Science Fiction Story Backgrounds

MODULE – V

Painting Backgrounds For Mythological Stories, Day/Night Scenes Etc.

Books for Reference

1. How To Draw What You See: Rudy De Reyna
2. Layout And Composition For Animation: Ed Ghertner
3. Animation Background Layout: Mike S Flower
4. Don Bluth's Art of Storyboard : Don Bluth
5. Complete Guide to Watercolor Painting : Edgar Whitney
6. The Watercolor Book - Materials and Techniques for Today's Artists: David Dewey

SEMESTER – IV

AGDG401: ANIMATION TECHNIQUES (AOC)

Objectives: Here students experiments with different methods and techniques for creating animation. The basic tools and techniques are learned through a series of practical assignments.

MODULE – I

Creation Of A Thaumatrope – Creation Of A Flip Book - Difference Between Time-Lapse And Stop Motion Animation Techniques – Time Lapse Animation Set Ups – Creation Of Time-Lapse Animations.

MODULE – II

Brief History Of Stop Motion Photography - General Workflow Of Stop Motion Animations - Procedures And Techniques: – Choosing Camera, Tripods, Lights, Software Etc. – Preparation Of :- Script, Storyboard, Character Designs Etc. - Character And Props Creation For Stop Motion Animation – Set Designing For Stop Motion Animation – Lighting - Post Production

MODULE – III

Cutout Animation Project - Preparation Of Characters/ Models – Finding Suitable Materials For Making Characters – Different Medium For Adding Details On A Model - Set Designing - Lighting

MODULE– IV

Puppet Animation /Clay Animation Project – Types Of Puppets: –Simple Clay Models, Toys, Maquette, Armature, Simple Wire And Plasticine Puppets And Clothed Puppets - Preparation Of Models – Colouring – Costumes

MODULE – V

Pixilation Project - Preparation Of: - Script, Storyboard, Models Etc. - Set Designing - Lighting - Animation - Post Production.

Books for Reference

1. The Animation Book: Kit Laybourne
2. Stop Motion - Craft skills for model animation: Susannah Shaw
3. Stop Motion Passion, Process And Performance : Barry J C Purves
4. The Animator's Survival Kit : Richard Williams

SEMESTER – IV

AGDS402: CEL ANIMATION - I (AOC)

Objectives: In this course, students explore various techniques and core concepts of cel animation. Strong emphasis is placed on the human animations with dialogues.

MODULE – I

Line Of Action - Path Of Action – Maintaining Volume - Key Drawings – Extremes And Breakdowns - In-Betweens – Spacing And Charting – Numbering Of Animation Drawings – Animation Methods: - Straight Ahead, Pose To Pose, Combination Of Both.

MODULE – II

Experiments With The Basic Principles Of Animation.

MODULE – III

Acting For Animators – Character Acting - Voice Acting - Expressions - Body Language.

MODULE– IV

Animating Walks – Normal And Stylized Walks – Walks Of Different Types Of Human Characters - Runs - Different Types Of Runs – Runs Of Different Types Of Human Characters - Jumps – Skips – Leaps - Takes And Double Takes – Anticipation – Overlapping Actions – Mass And Weight.

MODULE – V

Dialogue Animation – The Sound Track - Phrasing – Accents – Attitudes – Recoding Of Dialogues And Voice-Over - Creation Of X Sheets – Synchronising Sound.

Books for Reference

1. The Animator's Survival Kit : Richard Williams
2. Cartoon Animation : Preston Blair
3. Timing for Animation : Harold Whitaker and John Halas
4. How to Make Animated Films : Tony White
5. The Male and Female Figure in Motion: Eadweard Muybridge

SEMESTER – IV

AGDS403: CEL ANIMATION - II (AOC)

Objectives: Emphasis is placed on both technical and artistic mastery in animating animals, birds, reptiles etc. This course provides the student a basic understanding of effects animation also.

MODULE – I

Animation Of Different Types Of Animals:- Four Legged , Two Legged (Eg: Cat, Dog, Tiger, Elephant, Monkey, Kangaroo, Horse, Deer, Cow, Camel, Bear, Dinosaur Etc.) - Walks – Normal And Stylized Walks –Canter – Trot – Gallop - Runs - Jumps – Skips – Leaps - Etc.

MODULE – II

Bird Flight / Movements In Different Stages – Practice With Different Types Of Birds

MODULE – III

Movements Of Reptiles:- Walks, Runs, Slithering, Swimming Etc. - Animating Insects And Fishes

MODULE– IV

Dialogue Animation Of Humanoid Characters

MODULE – V

Animating Special Effects: - Cloth, Sky, Smokes, Fire, Lightening, Rainfall, Snow, Water Drops, Water Ripples, Waves, Explosions Etc.

Books for Reference

1. The Animator's Survival Kit : Richard Williams
2. Cartoon Animation : Preston Blair
3. Timing for Animation : Harold Whitaker and John Halas
4. How to Make Animated Films : Tony White
5. Character Animation-2D Skills for Better 3D: Steve Roberts
6. Horses And Other Animals In Motion: Eadweard Muybridge

SEMESTER – IV

AGDS404: DIGITAL 2D ANIMATION (AOC)

Objectives: Students are introduced to Digital 2D animation using any one of the popular 2D Animation Softwares. This course introduces students to Digital 2D animation. The basic tools and techniques are learned through various practical assignments.

MODULE – I

Workflow Of Digital 2D Animation – Introduction To Animation Software’s Interface – Customizing The Workspace - Settings And Preferences - Importing Files - Selection Tools - Selecting Objects - Moving, Copying And Deleting Objects - Duplicating Objects – Grouping Objects – Find And Replace Command - Arranging Objects (Stack, Align, Group, Break Apart Groups And Objects) - Transforming Objects - Snapping (Object Snapping, Pixel Snapping And Snap Alignment - Eraser Tool Etc.

MODULE – II

Drawing And Painting Tools - Drawing With Pencil Tools –Drawing And Editing Lines And Shapes - Outlines - Working With Color - Strokes And Fills – Tracing An Image - Stage – Timeline – History Panel - Color Panel – Layers – Frames– Library - Instances - Symbols- Types Of Symbols - Creation Of Symbols - Duplicate Symbols - Edit Symbols - Symbol Instances - Templates

MODULE – III

Animation Basics - Animation Levels – Empty Cels – Held Cels – Basic Key Framing – In Betweening - Representations Of Animation In The Timeline -Frame Rates - Frame By Frame Animation - Onion Skinning– Tweening – Scrubbing – Rotoscoping – Blend Modes - Mask Layers - Working With Text - Special Effects

MODULE– IV

Experiments With Basic Principles Of Animation - Cyclic Animations – Lip Sync Animation – Setting Up Camera Techniques

MODULE – V

Digital 2D Animation Project

Books for Reference

1. The Animator's Survival Kit: Richard Williams
2. Timing For Animation: Harold Whitaker And John Halas
3. The Animator’s Guide To 2d Computer Animation : Hedley Griffin
4. Character Animation-2d Skills For Better 3d: Steve Roberts
5. How To Make Animated Films : Tony White
6. Flash Cartoon Animation: Learn From The Pros : Glenn Kirpatrick And Kevin Peety
7. The Art Of Flash Animation: Creative Cartooning : Mark Stephen Smith
8. Digital Pre-Introduction Basic: Toon Boom Animation Inc.

SEMESTER – IV

AGDS405: PROJECT – ANIMATION PROJECT

In this project students should complete an animation short film of minimum 90 seconds duration which showcases their creativity, aesthetic sense and technical skills that they acquired during their academic period. Students must do this project individually.

They can choose any of the following methods for their project work.

- Entire project as Classic Cel Animation
- Entire project as Digital 2D Animation
- Entire project as Stop-motion Animation
- Digital 2D Animation + Stop-motion Animation
- Classic Cel Animation + Stop-motion Animation

(Students can select any of the above animation methods according to his/her interest and talent.)

Project should be worked out through various production stages under the guidance and approval of the supervising faculty/faculties. Students have to complete the final project within the given time period. Students should keep all the important paper works (script, storyboard and character designs) along with them.

Students must submit the finished animation project in video format along with the required paper works and a comprehensive report, to the Head of the Department, before the day of the project evaluation. The project will be evaluated by the external and internal examiners appointed by the university. Delayed, incomplete submissions will be considered as it is.

SEMESTER – IV

AGDS406: INTERNSHIP – II

After the completion of the fourth semester, the students will have to undergo a two weeks' internship programme. It will be in a professional 2D (Digital/Manual) Animation studio OR in a Stopmotion studio to understand various steps and techniques involved in a production pipe line.

Students can choose an animation studio in India or abroad for their internship. College will provide a certificate to prove their identity. A member of the faculty will supervise the student during the internship.

Studios having the following qualities can be chosen:

- a. A minimum of two years' experience in animation field specializations in character animation, movie titling, advertisements, special effect creation, etc.
- b. Should have produced a minimum of two popular animation works for the last one year.

At the end of the internship, the students should prepare a comprehensive report. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the organization. All the above details should be submitted to the Head of the Department for evaluation.

SEMESTER – V

AGDG501: MEDIA ETHICS AND EDUCATION

Objectives: To understand the positive as well as negative influence of media and the critical evaluation of media.

Module – I

Ethics – Branches of Ethics, Media Ethics – Mass Media and the shape of the Human Moral Environment. Applied Ethics – Ethical issues in different media professions – Journalism, Cinema, Advertising, Photography, Graphic Design, Animation etc.- Overview of Codes and Regulations in India. Digital Media Ethics.

Module – II

Media Education – Objectives and Skills – Key Concepts, Media Scenario: Present Trends – Different Starting points for Media Education – Media Impact in Society – Social and Psychological impacts.

Module – III

Culture and Communication – Culture as Communication – Inter-cultural Communication – Values, World view and Perception – Values in Culture – Values and Communication – From Ethnocentrism to Ethno relativism.

Module – IV

Mass Media: Relevance and significance. Purpose and functions of Mass Media – Mass Media, Individuals and Society – Connecting to “Reality” through Media – Media and Society: Normative theory.

Module – V

Media Language – Media as Art Experiences – De-Mystifying the Media – Media and Consumerism – The Philosophy commercialism – Media and De-humanization – Sex and Violence in the Media – Media and Moral Permissiveness – Media and Imperialism – Cultural Erosion and Mental Colonization – Media Control – Alternative Media.

Books for Reference

1. Mass Media and the Moral Imagination : Philip J Rossi
2. Media Education in India : Jacob Srambickal
3. Media Ethics : Bart Pattyn
4. Communication Ethics and Universal Values : Clifford Christmas
5. Digital Media Ethics : Charles Ess

SEMESTER – V

AGDS502: ELEMENTS OF 3D ANIMATION (AOC)

Objectives: Students are introduced to 3D animation using any one of the popular 3D Animation Softwares. Students learn the basic workflow, and get introduced to the terminology and core concepts of 3D CG creation. Here the students are introduced to the 3D Software and its basic operations.

MODULE – I

3D Objects - Coordinate System – Major 3D Softwares And Plug Ins– 3D Animation Work Flow – Uses And Scope Of 3D Animation.

MODULE – II

Exploring The Interface Of 3D Animation Software - View Port Navigation - Working With Files And File Types - Importing & Exporting 3D Files – Setting A Project – Preferences

MODULE – III

Creating & Editing Primitive Shapes - Wireframes, Surfaces, And Normals - Selecting Objects & Setting Object Properties – Sub Object Levels – Transforming Objects, Aligning & Snapping – Pivots - Cloning Objects & Creating Object Arrays - Grouping & Linking Objects

MODULE – IV

Polygons – Splines - Quads Vs. Ngons - Mesh Flow - Topology – Clean Up

MODULE – V

Basic Modeling With Polygon, Splines & Nurbs And Sub Modeling Methods - Extrude – Bevel – Cut – Split – Bridge – Boolean Operations – Lattices – Deformers – Normals – Mirrors

Books for Reference

1. The Art of 3D Computer Animation and Effects: Isaac Kerlow
2. 3D Human Modeling And Animation: Peter Ratner
3. Autodesk 3ds Max 2014 Essentials: Randi L .Derakhshani, Dariush Derakhshani
4. Autodesk Maya 2014 Essentials: Paul Naas
5. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering : Ben Simonds
6. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
7. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya : George Avgerakis

SEMESTER – V

AGDS503: BG AND PROPS MODELING (AOC)

Objectives: In this course strong emphasis is placed on making 3D models of non-living things. Students practice modeling with and without the use of reference images. Students will explore various techniques of Polygon, NURBS and SubD Modeling methods.

MODULE – I

Concepts of Low Poly Modeling- Modeling With Primitives - Modeling Simple Objects: Simple House-Hold Objects – CAD Programmes – CAD Files

MODULE – II

Detailed Modeling of Objects: - Furniture, Instruments, Vehicles Etc.

MODULE – III

Modeling Character Props: - Sword, Knife, Hat, Gun Etc.

MODULE – IV

Exterior Modeling: - Environments- Ponds, Hills, City, Garden Etc

MODULE – V

Interior Modeling: - Architectural / Industrial Structures

Books for Reference

1. 3D Human Modeling And Animation: Peter Ratner
2. 3D Automotive Modeling: An Insider's Guide to 3D Car Modeling and Design: Andrew Gahan
3. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering : Ben Simonds
4. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
5. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya : George Avgerakis

SEMESTER – V

AGDS504: CHARACTER MODELING (AOC)

Objectives: In this course students learn to make 3D models of living things. Students should practice character modeling with and without the use of Blue prints. Students should explore various techniques of Polygon, NURBS and SubDM modeling methods also. Importance is given to the consistency and mesh flow.

MODULE – I

Modeling Humans – Basic Proportions - Modeling Of Body Parts: - Head, Ear, Mouth, Limbs, Torso, Cloths, Ornaments Etc. – Creation Of Blend Shapes.

MODULE – II

Modeling Different Types Of Human Characters:-Real, Stylized, Comic, Characters Of Different Age Group Etc.

MODULE – III

Modeling Animals And Birds - Basic Proportions, Modeling Of Body Parts: - Head, Ear, Horns, Mouth, Limbs, Torso, Tail, Wings Etc.

MODULE – IV

Introduction To Sculpting Tools - Modelling Imaginary Characters

MODULE – V

Each Student Designs And Prepares Blueprint Of A Character And Creates Detailed Model Of It.

Books for Reference

1. ZBrush Character Creation: Advanced Digital Sculpting: Scott Spencer
2. ZBrush Digital Sculpting: Human Anatomy: Scott Spencer
3. Character Development in Blender 2.5: Jonathan Williamson
4. Autodesk 3ds Max 2014 Essentials: Randi L .Derakhshani, DariushDerakhshani
5. Autodesk Maya 2014 Essentials: Paul Naas
6. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering : Ben Simonds
7. 3D Human Modeling And Animation: Peter Ratner
8. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya : George Avgerakis

SEMESTER – V

AGDS505: TEXTURING AND RIGGING (AOC)

Objectives: This course is mentioned to provide the student a thorough understanding of Texturing and Rigging process. Students will explore these techniques by texturing and rigging several types of objects/ characters.

MODULE – I

Shaders / Materials – Diffuse, Ambient, Specular Colours – Transparency – Different Maps: - Bump, Refraction, Reflection, Displacement, Translucent – Different Types Of Material Creation: - Glass, Steel, Water, Gold Etc.

MODULE – II

Textures – Planar, Cylindrical, Spherical, Automatic – Loading Meshes – UV Layout Display Panel - Editing UV Layouts – Cutting, Splitting And Dropping Of Uvs – Flattening And Optimizing Uvs – Welding – Previewing Uvs With Texture Map – Hiding, Revealing And Marking Geometry – Symmetry – UV Adjusting – Polygon Marking And Transformations – Pinning And Straightening – Snapping And Stacking Uvs – Packing Uvs Together – Laying Surfaces – Scaling And Smoothing Uvs – Fixing UV Overlaps – Use Of Multiple UV Projector – Transferring UV Layouts – UV Snapshots Multiple UV Tiling - UV Painting – Application Of The Texture - Procedural Texturing - Background Texturing

MODULE – III

Importing 3D Objects Directly Into Texture Painting Softwares – Painting UV Map

MODULE– IV

Naming Conventions – Adjusting Pivots – Hierarchy - Parenting Objects– Joints – Joint Attributes – Skeleton Creation With Joints – IK – FK - Creating Controls – Constraints – Locking And Hiding Animation Channels – Custom Attributes – Driven Keys - Expressions – Deformers – Binding/ Skinning – Skin Weight Manipulation – Blend Shapes

MODULE – V

A Project Based On Texturing And Rigging

Books for Reference

1. Animation Methods - Rigging Made Easy: Rig Your First 3D Character in Maya: David Rodriguez
2. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering : Ben Simonds
3. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
4. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya : George Avgerakis

SEMESTER – V

AGDS506: CHARACTER ANIMATION (AOC)

Objectives: Different methods for creating 3D animation are explored in this course.

MODULE – I

Motion Laws In Physics - Forces, Acceleration, Reactions, Mass And Momentum, Centre Of Mass, Friction.

MODULE – II

Concept Of Keys And Key Frame Animation - Posing Characters - Planning And Blocking Animations – Breakdowns – Animation Curves – Editing Curves – Creating Animation Paths – Hierarchies – Pivots - Animation Layering.

MODULE – III

Animating Different Types Of Characters: - Humans, Animals, Birds, Reptiles, Insects Etc. - Cyclic Animations: - Walks, Runs, Flights – Jumps – Animation Of Camera And Light.

MODULE– IV

Facial Animation – Animating To Music And Dialogues - Lip Sync - Expression Editor - Dope Sheet - Blend Shapes – Motion Capture.

MODULE – V

Application Of Animation Principles: - Squash And Stretch, Anticipation, Staging, Overlapping Action, Slow Out And Slow In, Arcs, Timing, Exaggeration Etc.

Books for Reference

1. Autodesk 3ds Max 2014 Essentials: Randi L .Derakhshani, DariushDerakhshani
2. Autodesk Maya 2014 Essentials: Paul Naas
3. Character Animation-2D Skills for Better 3D: Steve Roberts
4. The Animator's Survival Kit: Richard Williams
5. Timing for Animation: Harold Whitaker and John Halas
6. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya : George Avgerakis

SEMESTER – VI

AGDG601: SOFT SKILLS AND PERSONALITY DEVELOPMENT

Objectives: To develop personal, social and interpersonal skills required for the profession.

Module – I

Personal Skills: Knowing oneself- confidence building- defining strengths- thinking creatively- personal values-time and stress management.

Module – II

Social Skills: Appropriate and contextual use of language- non-verbal communication- interpersonal skills- problem solving.

Module – III

Personality Development: Personal grooming and business etiquettes, corporate etiquette, social etiquette and telephone etiquette, role play and body language.

Module – IV

Presentation skills: Group discussion- mock Group Discussion using video recording - public speaking.

Module – V

Professional skills: Organisational skills- team work- business and technical correspondence- job oriented skills-professional etiquettes.

Books for Reference:

1. Matila Treece: Successful communication: Allyun and Bacon Pubharkat.
2. Jon Lisa Interatid skills in Tourist Travel Industry Longman Group Ltd.
3. Robert T. Reilly – Effective communication in tourist travel Industry Dilnas Publication.
4. Boves. Thill Business Communication Today Mcycans Hills Publication.
5. Dark Studying International Communication Sage Publication.
6. Murphy Hidderandt Thomas Effective Business Communication Mc Graw Hill.

SEMESTER – VI

AGDS602: LIGHTING AND RENDERING (AOC)

Objectives: This course emphasises on both technical and artistic mastery in the art of digital lighting and rendering of a 3D scene.

MODULE – I

Normal And Artificial Lighting – 1 Point, 2 Point, 3 Point Lighting In 3D Space – Types Of Lights (Point, Target, Direct, Ambient Etc.) – Common Light Attributes – Shadows – Shadow Colour – Shadow Depth.

MODULE – II

Lighting A Character - Lighting A Scene To Matching The Environment - Exterior Lighting – Interior Lighting.

MODULE – III

Ray Tracing - Final Gathering – Global Illumination And Caustic Effects - Render Setups (Single Frame Rendering, Batch Rendering, Different Rendering Formats) – Motion Blur – Applying Render Passes For Compositing.

MODULE– IV

Image Based Lighting And HDRI Rendering.

MODULE – V

Project Work Based On Lighting And Rendering.

Books for Reference

1. Digital Lighting And Rendering: Jeremy Birn
2. Mastering Mental Ray: Rendering Techniques For 3D And CAD Professionals: Jennifer O'Conner
3. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
4. Blender Master Class - A Hands-On Guide To Modeling, Sculpting, Materials, And Rendering : Ben Simonds
5. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya : George Avgerakis

SEMESTER – VI

AGDS603: VISUAL EFFECTS AND COMPOSITING (AOC)

Objectives: This course focusses on study and analysis of visual effects and compositing. Different methods for creating visual effects and compositing with Adobe After Effects and Autodesk Smoke are explored in this course.

MODULE – I

Adobe After Effects : User Interface Navigation – Importing Image Sequences And Footages – Time Line - Layers – Pass – Key Frames - Composition Settings – Transitions – Layer Animations – Different Types Of Layers :- Text, Solid, Adjustment, Null, Camera, Light Etc.

MODULE – II

Effects – Procedures: Keying, Rotoscopy, Tracking And Stabilizing– Parenting – Masking – Alpha – Parallax – Color Correction – Adding Text – Render And Export.

MODULE – III

Autodesk Smoke: Setting Up A Project – Preferences – Interface – Importing And Organizing And Viewing Media Files – Timeline – Effects – Color Correction – Multi Layer Compositing – Keying – Blend – Action – Importing 2D And 3D Objects To Layers.

MODULE– IV

Video Editing: Creating New Sequence – Playing Source Media – Drag And Drop – Track Selection – Trimming – Trim View – Transitions - Dissolves – Wipes

MODULE – V

Audio Editing: Audio Levels – Effects – Exporting The Project

Books for Reference

1. Adobe® After Effects® CS6 Visual Effects And Compositing Studio Techniques: Mark Christiansen
2. Secrets of Hollywood Special Effects: Robert E. McCarthy
3. Industrial Light & Magic - The Art of Special Effects: Thomas G. Smith
4. The Language of Visual Effects: Micheal J. McAlister
5. Special Effects - Creating Movie Magic: Christopher Finch
6. The VES Handbook of Visual Effects - Industry Standard VFX Practices and Procedures: Susan Zwerman, Jeffrey A. Okun
7. Compositing Visual Effects - Essentials for the Aspiring Artist: Steve Wrigh
8. Autodesk Smoke Essentials - Autodesk Official Press : Alexis Van Hurkman

SEMESTER – VI

AGDS604: AUDIO AND VIDEO EDITING PRINCIPLES (AOC)

Objectives: To expertise the students in the process of creating illusion of movement and the basic principles involved in narrating a visual story and also provide the students the scientific aspect regarding Production and Reproduction of Sound.

MODULE – I

Video Editing: -Factors Impacting Editing Choices- Basic Shot Types And Its Descriptions - Selecting The Best Shots -The Basic Edit Transitions- Stages Of The Editing Process.The Factors For A Good Edit- Information-Shot Composition-Camera Angle-Continuity Etc-Building A Rough Cut -Master Shot Style-Cutaways And Reaction Shots-Matching Action - Matching Screen Position -Overlapping Edits Matching Emotion And Tone -Sound Effects And Music - Transitions Between Scenes- Fine Cutting.

MODULE – II

Setting Up A Workstation: Networked Systems- SANs And NAS-Render Farms-Audio Equipment-Digital Video Cables And Connectors-FireWire- SDI And HD-SDI –Thunderbolt-RS-422 -Audio Interfaces Etc- Organizing The Media – Different Formats-Film,2K,4K HD And SD-Setting Up The Project-Importing, Transcoding, Logging And Capturing.

MODULE – III

Introduction To Editing Software: Concept Of Workflow-Interface- Editing Tools-Story Board Editing Drag-And-Drop Editing -Three-Point Editing-JKL Editing-Insert And Overwrite Editing-Trimming-Ripple And Roll, Slip And Slide - Effects And Titles- Audio Tools- Audio Effects And Filters- Basic Repairing Of Sound- ADR And Mixing-ColorCorrection-Media Management Etc. - What Is Mastering? -Preparing A Sequence-Color Grading -Create A Mix-Exporting The Masters-Compressing For The Web- Disc Authoring.

MODULE– IV

Audio Editing: Human Ear And Principles Of Microphone – Different Types Of Microphones – Multi Directional, Bi-Directional, Uni- Directional, Wireless Microphone – Rifle Microphone – Lapel Microphone Etc -Studio Microphones – Location Microphones.Components Of A Single Mixed Track – Multiple Track Recording — Monophonic Recording – Stereophonic Recording – Surround Sound – DTS-Dolby.Recording Sound InControlled Situation – Playback – Pre-Recording – Dubbing – Post Synchronisation – Voice Recording – Music Recording.

MODULE – V

Introduction To Audio Editing Software: Editing Basics, Number Of Tracks, Normalisation Of Levelling, Noise Filters, Filtering And Advanced Effects.

Books for Reference

1. The Digital Filmmaking Handbook: Sonja Schenk, Ben Long

2. Techniques of Editing :KarelReiz
3. Elements of Sound Recording: Frayne and Wolfe
4. The Technique of Sound Studio: Nisbett
5. Elements of Sound Recording: Frayne and Wolfe

SEMESTER – VI

AGDS605: PROJECT – 3D ANIMATION PROJECT

Students must do this project individually. And it should cover all the important aspects of 3D animation that the student studied during the third year of his/ her course, and should be an example of an advanced 3D Character animation Acting Piece with Dialogue. It may or may not be a Two Character Interaction Piece.

For this project students should complete a character animation of minimum 90 seconds duration. Project should be worked out through various production stages under the guidance and approval of the supervising faculty/faculties. Students have to complete the final project within the given time period, and they should keep all the important paper works (script, storyboard and character designs) along with them.

Students must submit the finished project in video format along with the required paper works and a comprehensive report, to the Head of the Department, before the day of the project evaluation. The project will be evaluated by the external and internal examiners appointed by the university. Delayed, incomplete submissions will be considered as per the university rules.

SEMESTER – VI

AGDS606: INTERNSHIP – III

After the completion of the sixth semester, the students will have to undergo a minimum of two weeks' internship programme. It must be in a professional 3D/ VFX Animation studio to understand various steps and techniques involved in a production pipe line.

Students can choose an animation studio in India or abroad for their internship. College will provide a certificate to prove their identity. A faculty member will supervise the student during their internship.

Studios having the following qualities can be chosen:

- a. A minimum of two years' experience in animation field specialized in Character Animation, Movie Titling, Advertisements, Special Effect Creation, Etc.
- b. Should have produced a minimum of two popular animation works for the last one year.

At the end of the internship, the students should prepare a comprehensive report. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the organization. All the above details should be submitted to the Head of the Department for evaluation.