UTTARAKHAND TECHNICAL UNIVERSITY
DEHRADUN

Syllabus of

Master's in animation & Visual Effects

For Colleges Affiliated to
Uttarakhand Technical University, Dehradun

Prepared by

Board of Studies on Animation & Visual Effects

Uttarakhand Technical University, Dehradun

***Organize on* 27.02.2011, Sunday**
At Doon School of Media & Communication
175, Rajpur Road, opp. Hotel Madhuban, Dehradun

THE REPORT

The Uttarakhand Technical University has set up 'Board of Studies for Animation & Visual Effects' by a office order wide number 8019/Academic/Bos/2011 dated 19.02.2011.

As per this order, 'Board of Studies for Animation & Visual Effects' of 'M.Sc. in for Animation & Visual Effects' of this University is hereby constituted as follows:-

1. **Prof. Durgesh Pant,** Head of the Department, Faculty of Computer & Science & IT Uttarakhand Open University, Haldwani. **(Convener)**
2. **Prof. Shekhar Joshi,** Head of the Department, Faculty of Fine Art & Visual Art, Kumaun University, Nanital.**(Member)**
3. **Dr. Ashish Negi, ,** Head of the Department, Faculty of Computer & Science & IT Govt. Engg. College, Pauri. **(Member)**
4. **Mr. Rajnesh Gautam,** Director MAAC, Muzaffarnagar **(Member)**
5. **Dr. Hariom,** Asst. Prof., Faculty of Drawing & Painting, DAV(PG) College, Dehradun. **(Member)**
6. **Shri Deepak Chandra,** Former V.P. TGC Multimedia, New Delhi. **(Member)**
   Shri Sheshmani, Bureau Correspondent, Amar Ujala, Patel nagar, Dehradun. **(Member)**

The Committee met on 27.02.2011 , Dr. Durgesh Pant Convener of BoS has presides over the meeting.

The Committee has studies many curriculums of different universities.

1. **B.Sc. Multimedia, Animation & Graphic Design**, Course Syllabus, Allahabad Agriculture Institute (Deemed to be University) Allahabad.
2. **B.Sc. Animation,** Course Syllabus, Bhartidasan university Tiruchriapalli.
3. **B.Sc. Animation & Film Making** Course Syllabus, Punjab Technical University, (State University) Jalandhar.
4. **B.Sc. Animation &** Multimedia, Course Syllabus, Birla Institute of Technology, Noida Campus.
5. **B.Sc. Animation**, Course Syllabus, Karnataka State Open University, Karnataka.
6. **M.SC. IN COMPUTER ANIMATION AND GAMES DEVELOPMENT, M.S. RAMAIHA SCHOOL OF PROFESSIONAL STUDIES, BAGLORE**
7. **M.Sc Animation & Multimedia** Course Syllabus, Punjab Technical University, (State University) Jalandhar
8. **M.A. Animation,** Course Syllabus, Karnataka State Open University, Karnataka.
9. **B.A. 3D Animation & Visual Effects, (Face to Face)** Course Syllabus School of Communication, IGNOU, New Delhi

Degree Nomenclature

The Committee reviewed various existing nomenclatures in different Indian Universities which run professional course in Animation & Visual Effects' and felt that the nomenclature of the Master's Degree programme should only be M.Sc. in for Animation & Visual Effects'

The Medium of Instructions:

The medium of Instruction will be both Hindi and English.

Eligibility to apply for Admission:

Candidates holding a Bachelor's Degree of three years or more duration such as degree of Fine Art, Drawing & Painting, medicines, engineering, agriculture, nursing etc. from a recognized Indian University or an equivalent degree from foreign University should be eligible to apply for admission to the Master's Degree Course in Animation & Visual Effects'

Admission Procedure:

1. A pre- admission written test will be held to select students for admission to the Master's Degree Programme named as M.Sc. in for Animation & Visual Effects'.
2. The entrance test will include two papers. Each paper will be of 100 marks.
3. Qualifying marks in each paper of entrance test will be 30% but relaxation can be made by Counseling Committee keeping in view the total number of the students as compared to the number of total available seats.
4. The written entrance test papers will be aimed to assess over all competence and capability of the candidates to meet the requirements of the modern Mass Communication discipline/industry. Hence there will be following papers:
   a) Subject Aptitude
   b) Language Proficiency, General Knowledge and General Awareness.
5. It will be obligatory to appear in the entrance test for each candidate who is interested in seeking admission to M.Sc. in for Animation & Visual Effects'.
6. If any student without appearing in the entrance test gets admission at any College, he/she can be prevented to appear in the final examination of any semester of the course by the University as and when it comes to the notice of the University.
7. Further, if any student who has not appeared in the entrance test but got admission and also managed to appear in the final examinations of the semesters of the said course, the University will have the right to cancel any such examination or degree of any such student.
8. In case, some seats remain vacant and the candidates who appeared in the written entrance test are not willing to take admission, then the concerning Campus/College / Institute must have to report to the Registrar of the University about the number of vacant seats and also to request for the further process for the filling seats. After this, necessary action will be taken by the University.
9. After completing the admission, each study center will have to submit the list of admitted students with the Roll No. of entrance test to the Registrar of the University for record.
10. The concerned affiliated Institute/Colleges may be required to contribute for meeting the expanses of the entrance test including charges of advertisement related to this test as per decision of the University.

11. If a candidate seeks admission on non self financed seat but he/she leaves the course without completing in then such candidate will not be given admission in future on non self financed seat.

Reservation:

The reservation will be as per Uttarakhand Government Rules as followed by the University.

Intake:

The intake of candidates to M.Sc. in for Animation & Visual Effects'course should not exceed 30 as per UGC guidelines. Hence the intake for the Centre for Animation & Visual Effects will be 30 candidates while seats for other Campuses/Institutes will be as per approval of the State Government after the Recommendation of the related Affiliating Panel.

Fee and Resource Generation:

1. Every candidate selected for the admission to M.Sc. in for Animation & Visual Effects' shall have to pay Campus Admission & Monthly fee as scheduled for other Master Degree Courses of respective faculty for each year.
2. In addition to the normal fee (Campus Admission & Monthly fee) as mentioned above, all the candidates will have to pay Rs. 5000/=(Three Thousand) as Practical and Profession Fee as special contribution for development of practical facilities and professional efficiency including Guest Lectures for each semester.
3. Before depositing Campus Admission and Monthly fee, the candidate must deposit the Practical and Profession fee at the centre for Journalism and Mass Communication.
4. The above fee structure (points 1, 2 & 3) is applicable for the Centre for Animation & Visual Effects 'of the University and not for the Self-financed Affiliated Study Centers.
5. The fee structure of the Self-financed College shall be fixed by the respective Study Centers/Affiliated college/Institutes after the approval of the State Government following the University procedure as per norms.
6. The self finance affiliated college may be charged admission/library/practical fee in addition to tuition fees.
7. It will be the responsibility of the respective self-financed study Centres/affiliated college/Institute to declare the fee structure for M.Sc. in for Animation & Visual Effects' before the commencement of the admission procedure.

Pass Marks and Division:

1. The minimum pass marks in each paper including viva-voce and dissertation should be 40%.
2. The minimum pass marks in each internal assessment and theory paper should be separately 40%.
3. The candidate should secure 50% marks in aggregate for passing the semester examination.
4. The candidate securing 50% marks in aggregate of the all semesters but below 60% marks shall be declared to have pass in IInd division and candidates securing

60% marks or more in aggregate shall be declared to have passed in Ist division. The student will have to pass separately in assessment, theory and practical.

5. Distinction will be given if a candidate obtains a total of 75% or more marks in aggregate in a single attempt (without the award of grace marks to pass in any paper).
6. Practical – The practical examinations will be held preferably before theory examinations. Where training/filed study is included in syllabus {and which is be evaluated at institute/university level} the same should be completed preferably before the end of semester.
7. The internal/external mark ratio will be generally uniform for all papers as applicable- 30/70 but those paper which will have no internal examination, have separate mention of the marks.
8. Internal marks will be forwarded to the university by the Departments/Institute at least 3 weeks prior to the commencement of the semester (theory) examinations.

Grace Marks:

In each semester, a candidate can be awarded Grace Marks of not more than 5% of the theory, if fails in only one theory paper but obtains the minimum aggregate marks required for the passing without considering the Grace Marks will not be awarded for internal assessment. If the 5% marks workout to be a friction/decimal it will be rounded off to the next higher number e.g. 1.25 to be rounded of as 02 marks.

Number of Back Papers Permitted:

1. The total number of failures in the various subjects will be restricted to four back papers in two successive semesters/ in one academic year. In such cases, the candidate is permitted to continue his study in the subsequent semester /year, but will have to clear the same within the specific duration for the completion of the course.
2. Back paper will be held only along with the main examination. Those who have passed both theory and internal will not be permitted for back paper/improvement.
3. Candidates are allowed only one attempt in the back paper.
4. Internal assessment with theory (external) and practical shall be considered separately as separate papers for back paper examination, but when a paper consists of both theory and practical, it will be treated as one paper. Hence a candidate can appear as an ex-student in practical/theory or both as the case may be. In case of back, position in merit list will not be included.
5. Each of the internal assessment with its theory (external) of a paper and practical will be treated separately for back paper examinations.
6. If a student obtains pass marks in internal assessment of a paper but fails in theory (external) examination, he/she will be permitted for the back paper only in theory and not in internal assessment. In case a student fails in internal assessment of a paper but secure pass marks in theory examination of the same paper, he/she will be treated as failed in the respective paper. Hence again he/she will have to pass both internal and theory (external) examinations of the same paper which will be treated as one back paper.

Maximum duration for completion of the course:

An additional period of 02 year will be given to a student to complete M.Sc. in for Animation & Visual Effects'course in continuation if required.
For example-if the batch is of 2010-2011, then it should be completed till 2014.

Submission of Dissertation:

Where a student fails in a dissertation or fails to submit in the specified time he/she shall be allowed to resubmit the same in the next batch of the fourth semester on payment of the requirement.

Promotion of candidates from odd to even semester:

Failure cases in semester 1st will go to semester 2nd and can appear in the said examination (Semester 2nd). But subsequently, he/she will not be admitted to semester 3rd , instead he/she not appeared as ex-student in semester 1st examination and will proceed to semester 3rd only when he /she has passed the semester 1st examination.

Failure cases in semester 2nd will go to semester 3rd and appear in the said examination (semester 3rd). But subsequently, he/she will not be admitted to semester 4th , instead he/she will have to appear as ex-student in semester 2nd examination and will proceed to semester 4th only when he/she has passed the semester 2nd examination.

Failure cases of 3rd semester will go to semester 4th and can appear in the said examination (semester 4th) provided the student has passed 2nd semester examination.

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STUDY AND EVALUATION SCHEME

SEMESTER-I

S.No.	Course Code	Subject Name	Period (Hours)		Sessional Exam	ESC	Subject Total	Credit Hours
		THEORY	L	P				
1.	MSAV 101	Communication & Communication Theories.	4	0	10	50	60	4
2.	MSAV 102	Introduction to Computing	4	0	10	50	60	4
3.	MSAV 103	Drawing & Sketching	4	0	10	50	60	4
4.	MSAV 104	Graphic Design & Visual Arts.	4	0	10	50	60	4
5.	MSAV 105	English Communication & Soft skills	4	0	10	50	60	4
PRACTICALS					DAY TO DAY EVALUATION			
1.	MSAV 106	Practical-I Paper-103	0	4	50	50	100	4
2.	MSAV 107	Practical-II Paper-104	0	4	50	50	100	4

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STUDY AND EVALUATION SCHEME

SEMESTER-II

S.No.	Course Code	Subject Name	Period (Hours)		Sessional Exam	ESC	Subject Total	Credit Hours
		THEORY	L	P				
1.	MSAV 201	Web Designing & Introduction to 2D Animation	4	0	10	50	60	4
2.	MSAV 202	Script Writing & Story Board Designing.	4	0	10	50	60	4
3.	MSAV 203	Intro to Digital Art Photography.	4	0	10	50	60	4
4.	MSAV 204	Introduction to Advertising & Market Research	4	0	10	50	60	4
5.	MSAV 205	Introduction to 3D Animation.	4	0	10	50	60	4
PRACTICALS					DAY TO DAY EVALUATION			
1.	MSAV 206	Practical-I Paper-201,202	0	4	50	50	100	4
2.	MSAV 207	Practical-II Paper-203,205	0	4	50	50	100	4

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STUDY AND EVALUATION SCHEME

SEMESTER-III

S.No.	Course Code	Subject Name	Period (Hours)		Sessional Exam	ESC	Subject Total	Credit Hours
		THEORY	L	P				
1.	MSAV 301	Digital Video & Sound Editing.	4	0	10	50	60	4
2.	MSAV 302	Advance 3D Animation (Modeling & Animation)	4	0	10	50	60	4
3.	MSAV 303	Film Appreciation.	4	0	10	50	60	4
4.	MSAV 304	Cinematography..	4	0	10	50	60	4
5.	MSAV 305	Advance Cinematrics	4	0	10	50	60	4
PRACTICALS					DAY TO DAY EVALUATION			
1.	MSAV 306	Practical-I Paper-301,302	0	4	50	50	100	4
2.	MSAV 307	Practical-II Paper-304,305	0	4	50	50	100	4

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SEMESTER-IV

S.No.	Course Code	Subject Name	Period (Hours)		Sessional Exam	ESC	Subject Total	Credit Hours
		THEORY	L	P				
1.	MSAV 401	Advance 3D Animation (Modeling & Animation) II	4	0	10	50	60	4
2.	MSAV 402	Cartoon Animation & Special Effects.	4	0	10	50	60	4
3.	MSAV 403	Dissertation & Viva.	4	0			100	4
4.	MSAV 404	Project- 2D Animation or 3D Animation	4	0			100	4
5.	MSAV 405	Internship	4	0			100	4

M.Sc. Animation & Visual effects

First Sem.

MSAV 101	Communication & Communication Theories.
MSAV 102	Introduction to Computing
MSAV 103	Drawing & Sketching.
MSAV 104	Graphic Design & Visual Arts.
MSAV 105	English Communication & Soft skills
MSAV 106	Practical- Paper 103
MSAV 107	Practical- Paper 104

Second Sem.

MSAV 201	Web Designing & Intro to 2D Animation
MSAV 202	Script Writing & Story Board Designing.
MSAV 203	Intro to Digital Art photography.
MSAV 204	Introduction to Advertising & Market Research.
MSAV 205	Introduction to 3D Animation.
MSAV 206	Practical- Paper 201 & 202
MSAV 207	Practical- Paper 203 & 205

Third sem.

MSAV 301	Digital Video & Sound Editing.
MSAV 302	Advance 3D Animation (Modeling & Animation)
MSAV 303	Film Appreciation.
MSAV 304	Cinematography.
MSAV 305	Advance Cinematrics
MSAV 306	Practical- Paper 301 & 302
MSAV 307	Practical- Paper 304 & 305

Forth sem.

MSAV 401	Advance 3D Animation (Modeling & Animation) II
MSAV 402	Cartoon Animation & Special Effects

MSAV 403	**Dissertation & Viva.**
MSAV 404	**Project- 2D Animation or 3D Animation**
MSAV 405	**Internship**

First Sem.

MSAV 101 Communication & Communication Theories.

UNIT-1

Communication & Basic Models: Definitions, Elements of Communication, Communication act, Sender, Message, Channel, Receiver, Effects, Feed Back, Communication process, Basics models of communication

UNIT-2

Types of Communication: Intra personal – Inter personal, Group, Mass communication and Mass-Line communication – Functions of communication – Effects.
Speech communication – cognition – Selective perception – Selective retention – Selective expression – Verbal and non-verbal communication

UNIT-3

Mass Communication, 'Mass' Concept, Characteristics of mass audience, Typology of audience, Classification of Media, Functions of Mass Communication, mass media and modern society – functions – mass media and democracy.

UNIT-4

Visual Communication Systems
Early communication systems in India , Introduction to India Art History : Ancient period (3500 BCE-1200 CE), Islamic ascendancy (1192-1757), Colonial period (1757–1947), Independence and the postcolonial period (Post-1947)
History of European Art : Ancient Middle East, Ancient Egypt, Ancient Aegean civilizations, Medieval period, Renaissance, Baroque period, Neo-Classicism , Post-Modernism. Christianity, ideology, Classical, Byzantine, Medieval, Renaissance, Baroque, Modern.

UNIT-5

Color Theory & Color Composition
Basic color theories, colors

MSAV 102 Introducing to Computing.

UNIT-1

Introduction to computers – history and generation of computers; types of computers hardwareand software; digital technology keyboard functions.
Components of Computer: Hardware, Software, Human ware; Functional Block diagram of a computer Hardware Units: Central Processing Unit (CPU); CPU Subunits - Arithmetic Logic Unit (ALU), Registers, Control Unit (CU); Primary and Secondary Memory; Input / Output, other hardware units and peripherals - sound card, video card, network card devices.

UNIT-2

Categories of Computers: Generation of computers; general and special purpose computers.
Types of Computers – micro computers, mini computers, mainframe and supercomputers;
Types of PCs - desktop, laptop, notebook, palmtop, their characteristics and specifications;
Number Systems: Decimal, Binary, Octal and Hexadecimal; r's, (r-1)'s complements.
Main Memories: Cache, RAM - Static, Dynamic; ROM – use and types; capacity and features of these memories.
Secondary Storage Devices: Magnetic Tapes; Magnetic Disks - Hard Disk Drives, Floppy Disks; Optical Disks - CD, DVD; Magneto-Optical Disks, Zip Drive and Flash drives.

UNIT-3

Input Devices: Keyboard, Mouse, Trackball, Joystick, Digitizing Tablet, Scanners, Digital Camera, MICR, OCR, OMR, Bar-code Reader, Voice Recognition, Light Pen, Touch Screen;
Output Devices: Monitors, Characteristics and Types of Monitor, Features - Size, Resolution, Refresh Rate, etc.; Video Standard – VGA, SVGA, XGA;
Printers- Categories of Printers – Impact, non-impact printers; Types - Character, Line. Page printers; Characteristics - Dot Matrix Printers (DMP), Inkjet, Laser, Thermal Printers, Plotters; Audio Output-speakers.

UNIT-4

Introduction to word processing, spreadsheet, presentation softwares.
Introduction to Viruses & www.
Internet: Multimedia: Multimedia PC, Multimedia objects, Authoring Systems, Applications and Advantages.

UNIT-5

Introduction to Operating System, its need and Operating System services; Operating System classification - single user, multi-user, simple batch processing, Multiprogramming, Multitasking, Parallel system, Distributed system, Real time system.
Functionaries of MS DOS/Windows/Linux/Macintosh.

MSAV 103 Drawing & Sketching

UNIT-1

Indoor & Outdoor Sketching & Drawing
Basics of Sketching & Drawing (with practice): Lines in different grades of pencils HB +0.8b, Shading in pencil medium, shading in different angles of pencil strokes, formatting in different textures with pencil, shading, simple objects in drawing, simple shapes of geometrical shapes, paper division & forming of sky land, stones, deserts, trees & plants, roadsides, rivers, perspective in lines in landscapes, different head shapes, characters, human anatomy (e.g.: Hands, legs, arms, different characters).
Drawing

UNIT-2

Geometrical Drawing & Perspective Drawing

UNIT-3

Still Life, Compositions (Based on historical, Social & Cultural)

UNIT-4

Mediums & techniques of Paintings.

UNIT-5

Clay Modelling

UNIT-6

Practical

MSAV 104 Graphic Design & Visual Arts

UNIT-1

Visual Art
An orderly arrangement of elements using the principles of design

The principles of design help you to carefully plan and organize the elements of art so that you will hold interest and command attention. This is sometimes referred to as visual impact.

In any work of art there is a thought process for the arrangement and use of the elements of design. The artist who works with the principles of good composition will create a more interesting piece of art it will be arranged to show a pleasing rhythm and movement. The center of interest will be strong and the viewers will not look away, instead, they will be drawn into the work. A good knowledge of composition is essential in producing good artwork. Some artists today like to bend or ignore these rules and therefore are experimenting with different forms of expression. We think that composition is very important. The following will assist you in understanding the basics of a good composition.

Elements of Design
Line, Color, Texture, Shape, Form, Value, Size

Principles of Compositional Design

The principles of design are the recipe for a good work of art. The principles combine the elements to create an aesthetic placement of things that will produce a good design.

Center of interest, Balance, Harmony, Contrast, Directional Movement, Rhythm

UNIT-2

Basic Designing Software: Windows Paint, Basics Concept making and Implement on Computer, Color knowledge, Generating Ideas, Basics About Various software's in Industry for still image manipulating, knowledge about pixels, measuring units in diff image manipulating software's.

UNIT-3

Vector Graphics (Designing, Color Theory, Vector Designing & Editing, and Text Formatting):
Interface: Working with menus, toolbars, Dockers.
Document Setup: Setting Page Size& Orientation, Document Navigation
Rulers & Guidelines: Status Bar.
Text: Formatting, Text Layout, Skewing and rotating, creating
Drop shadow, Text to Path, Extruding text.
Objects: Grouping & locking objects, Combining & breaking apart, Transforming & Shaping, Cutting objects apart, Trim, weld & Intersection of objects.

Lines & Curves: Using freehand & Bezier tool, Line properties, Arrowheads Eraser & artist media tools Nodes & Paths.
Color & Fills: Solid Color, Color Palettes, Eyedropper & Paint bucket, Fountain, Fills, Patterns, Texture Fills, Interactive Mesh Fill.
Special effects: Envelopes, Blends, Perspective, Shadow Objects, Power clip Command, Transparency, Distortion, Contour, Lens Docker.
Complex Shapes: Polygon & Stars Spirals Printing Menu.

UNIT-4

Raster Graphics (Designing, Color Theory, Raster Designing & Editing, text Formatting: Getting to Know the Work Area, starting to work in Adobe Photoshop, Color modes, Color, Using the tools, Selecting and using a tool from the toolbox.
Using the tool options bar and other palettes, Customizing the workspace, Using Photoshop Help, Viewing and editing files in Adobe Bridge, Embedding information for easy identification, Automating routine tasks, Resolution and image size, Straightening and cropping an image, Making automatic adjustments, Manually adjusting the tonal range, Replacing colors in an image, Adjusting lightness with the Dodge tool, Adjusting saturation with the Sponge tool, Retouching and Repairing, Repairing areas with the Clone Stamp tool, Using the spot Healing Brush tool, Using the Healing Brush and Patch tools, Retouching on a separate layer.
Working with Selections: About selecting and selection tools, Selecting with the Magic Wand tool, Using the Magic Wand with other selection tools, Working with oval and circular selections, Selecting with the lasso tools, Rotating a selection, Selecting with the Magnetic Lasso tool, Cropping an image and erasing within a selection ,Layer Basics, Using the Layers palette.

UNIT-5

Page Making: Document Setup Option Page Type, Page Style, Page Numbering, and Page Measurement Standard Tool Bar Options Create New Document with Setting, Open & Store Options, Preferences Import & Export Objects options, Scanning, Document Setup, Columns Guide Setting, etc. Formatting Tool Bar Option Copy Paste Options, Cross Pasting, Multiple Pasting, Insert Objects, and Import Images & Text from other Objects etc. Text Setting Options Fonts Setting, Control Palette, Paragraph Setting, Text Warping, Master Files, Text Rotating options Alignment Setting, Text Colors. Rulers & Guide Lines,

Print Out Bar Import Objects, Polygon Setting, Draw & Filling Objects, Alignment Setting of the Images etc.

UNIT-6

- Practical

MSAV 105 English Communication & Soft skills

UNIT-1

English Grammar: Proper Uses of Verb, Noun, Adverb, Adjectives, Punctuation, Para Phrasing in Business Communication, Understanding, Direct and Indirect Narration, Skills of Essay Writing and Precis Writing, Significance of knowledge of Grammar in Business Communication.

UNIT-2

Basic Forms of Communication, Communication Models, Communication Process, Barriers and Bottlenecks in Communication, Corporate Communication, Formal and Informal Communication Network, Grapevine, Non-Verbal Communication. Importance of Communication in Business World.

UNIT-3

Letter Writing: Principles, Structure, Planning, Drafting, Writing, Re-Writing, Editing, Different Types of Letters, Memos in Business Communication, Modern Office techniques used in Business Communication.

UNIT-4

Oral Communications, Public Speaking, Body Language, Presentations before the Group, Factors Affecting Presentation, Effective Listening, Interviewing Skills, Arranging and Participation in Group Discussion, Seminars and Conferences.

UNIT-5

Report Writing: Writing Skills, Planning, Drafting, Writing, Re-Writing, Editing, Different Types of Business Reports, Style of Report Writings.

MSAV 106
Practical -1

MSAV 107
Practical -2

Second Sem.

MSAV 201 Web Designing & Intro to 2D Animation

UNIT-1

The Fundamentals of Web Design: The web we know today, working of web, history of web, evolution of world wide web, now days the use of internet, sample web pages, how did they are constructed, function and stand point, hands on good web sites , browsing good web sites, analyzing a sample site from a functional standpoint.

The Principal of web Design: Well designed site from a poorly conceived one, difference between web and print design, focusing on those issues a web designer, discover top tem web design, and critique a sample site from an esthetic perspective.

Getting Started in Web Design: A technology does a web designer need to be master, look at well-stocked web design, software option for digital imaging, HTML editors and Multimedia, real-world design environment.

UNIT-2

Introduction to HTML: Begins with an HTML overview, how HTML evolved, how to construct a basic HTML page, explore the ins and outs of formatting, Web colors, images, and links, essential elements of a Web page, to create files and folders using the correct directory structure, view source code to learn from the inspiration of others, create an online menu for a restaurant.

Tools for Tables: HTML tables are used everywhere on the Web as a layout, content organization tool, tools for tables, construct them,, format them, place elements in them, and fix them when they break, to add sophistication to your tables by modifying their properties, adding background colors and images, and using cols pan and row span tags, explore a common application for tables by building an e-commerce product page from scratch.

Putting it all together: A taste of some of the challenges of a professional HTML assignment, the dynamic templates often used to construct e-commerce sites, an introduction to how HTML interacts with other coding languages such as ASP and Cold Fusion, the "front end" of a form is created, to create common form elements, wraps up with a guide to common HTML troubleshooting issues, create a 4-page "prototype" for an ecommerce site.

UNIT-3

The Stage, Transitions, and Behaviors: Script dictates techniques for transitioning your content in and out of main interface, drawing attention to important information and features with quick, tasteful animations.

Framing and Usability: HTML designing with Flash methods of embedding Flash site in an HTML page for optimal viewing. Publish your site, usability concerns, Flash usability debate. HTML for a seamless experience, and publish it to the Web.

The Future of Flash Site Design: Flash Web site with a splash preloaded page that occupies users' interest as main site loads.

UNIT-4

Human Anatomy (Theory)

Head - Frontal Bone – Temporal Bone – Orbit Bone – MALAR Bone – Mandible Bone – Maxilla Bone – Lower Jaw Bone – Mastoid Bone

Hand – Humorous Bone – Ulna Bone – Radius Bone – Carpals Bone – Meta Carpals Bone – Trachea Bone – Inner Cornville Bone – Outer Cornville Bone – Sternum Bone

Leg – Great Trochanter – Small Trochanter – Pub avis Bone – Isocheim Bone – Serum Bone – Trivia Bone - Tarsal Bone – Meta Tarsal Bone – Phalanges Bone – Oscalcius Bone
Abdomen – Clavicle Bone – Stascapula Bone – Serum – Thorax Bone – Twelfth rib Bone – Crest of Ilium – Exilic – Sacrum - Lumbar Vertebrae
Neck – Atlas – Axis – Epiglottis – Vocal Ligament – Hypoid Bone – Cervical Bone – Vertebrae Bone

UNIT-5

Cell Animation (Theory)
Digital 2D Animation orientation – Basic factors affecting the illusion of motion – Impact of digital techniques on the craft of film and video animation – Professional animation practice and job description – Prevailing file format standards and other compatibility issues – History and future trends of computer animation application in the visual arts.
2D animation application software interface – Default setting and user preferences – Document setup. Import and export formats – Document and timeline window feature – Tools and commands palettes – Media-selection tools and techniques Asset-management features.
2D graphics-creation features – Underlying data type: raster – vector – Raster painting and/or import features – Vector shapes – Vector free-form and control-point placement tools – Features specific to the program in use.
2D graphics editing features – Basic geometric transformation – Boolean operations on shapes – Object stroke attributes – Object fill attributes – Shading techniques (blends – gradients) – Packaged effects (extensions – Plug-ins) – Features specific to the program in use.
2D animation frame-sequencing features – Straight-ahead animation – Key frames animation – Motion paths – Applying geometric transformations over time – Intertwining options – Looping and palindrome motion – Features specific to the program in use.

UNIT-6

Development Body and Face Skills (Practical)
Eyes – Female Eyes and Male Eyes – How to begin – Line Inverse's Eye – Drawing Guidelines – Defining Upper Half and Lower Half – Iris and Pupil – Light Glares
Mouth and Noses – Three Basic Shapes – Drawing Guidelines – Curve and
curvature – Upper and Lower Lips – Different Styles of Mouths and Noses
Heads – Begin by a Large Circle – Drawing Guidelines chin Mark – Cheek Bones and Characters – 3/4th View – Three Dimensional Sphere and Angle of Drawing – Head at Various Angles – Male, Female, and Children Faces
Facial Expressions – Emotions and Parts of the Face – Sad Face and Sad Face Depressed – Anger, Confused, and Ticked off – Happiness and the Extents, and Surprise of Shock
Body – Shape and the Placement – Making a Subject Looks Natural – Drawing Guidelines – Drawing with the 45 Degree Placement Rule – Pose and Placements – Musculature Structure – Various Shoulder Positions – Upper Arm, Forearm and the Hand– Refining Poses – Legs and Calves

UNIT-7

2D Character Animation (Practical)
Beginner level – Introductory concepts to basic techniques in Animation, Principles of Animation Production. The Class is geared towards the beginner to intermediate student, and is centered on 2D character animation.
Intermediate level – Introductory concepts to basic techniques in Animation, Principles of Animation Production. The Class is geared towards the beginner to intermediate student, and is centered on 2D character animation.
Layout & Background Painting – Basic and Advanced techniques layout & Basic and Advanced techniques in BG Painting. The Student will learn everything from introductory concepts of perspective, color keys to advanced techniques in layout and Background painting. The class is geared up towards the beginner to intermediate student, and is centered on layout for animation. Cleanup and In-between –

and in-betweens. The class is geared up towards the beginner to intermediate student and is centered on Cleanup and in-betweens for 2D character animation.

UNIT-8

Practical

MSAV 202 Script Writing & Story Board Designing.

UNIT-1

Introduction to Scriptwriting, screenplay and teleplay Scripts are elements: Basics of Scriptwriting, Use of scriptwriting, Action, Scene Headings, Character Name, Screenplay Page Breaking, Short Lines/Poetry/Lyrics, Titles or Opening Credits, Screenplay Title Page, Continued and Revisions, Header Text + Do's & Don'ts, Screenplay Related Formats and full knowledge about teleplay script.

UNIT-2

Scriptwriting for both short film: Dialogue, Parenthetical, Extension, Shot Transition, Dual-Column Dialogue, Act numbers, Scene Numbers, Cast List, short lines, dialogue paragraphs, Script Styles & Types, Script Length Scene Heading Action Description , Character Name, Dialogue, Parenthetical, Extension, Transition, Shots.

UNIT-3

Scriptwriting for feature film: Dialogue split by Action, Emphasis in Action, Abbreviations, Short Lines, Dialogue Paragraphs, Montage & Series of Shots, Supers - Titles, Signs, etc, Phone Calls and Inter cuts two people talking at the same time.

UNIT-4

As student develops their own script: Attention will be paid to principles of script analysis, narrative strategy, genre & structure. By the end of the semester, students are expected to have developed a script treatment and flashed out the first act in script form.

UNIT-5

Introduction to storyboard: Introduction, Multimedia Storyboarding Tools, The Advantages of Storyboarding, Interactive Storyboarding, Using Interactive Storyboarding to Speed-up the Content-writing Phase, Using Interactive Storyboarding to Speed-up Report Document Production.

UNIT-6

Steps of storyboard writing: Storyboard table, Topic, Timeline, Sketches, color scheme, text attributes, Audio, camera angle, Interaction of buttons and text.

UNIT-7

Practical

MSAV 203 Digital Art photography.

UNIT-1

a. The Exploration Stage: The past and future of Photography (Digital Photography), Types of Cameras: Choosing Cameras, Start Taking Photos, Using buttons and menus,
b. Selection and Treatment: Selecting image size and quality, Image management, Photo editing tools Color management.
c. Execution, Installation & Presentation: Choosing Exposure modes, how your exposure system works and affects your image. Installation of different types of Image Editing Software, Slide show programs and background music, E-mail and websites, displaying images Wallpapers.

Digital Photography (Part - 1)

a. Inside the digital camera: Image sensor and types, In-Built memory and memory cards.

b. The Principles of Photography: The General Principles of Photography

Types of cameras: Miniature Cameras, medium format cameras, large format camera and digital cameras. Comparative study of digital and analogue (SLR) camera. Advantages and applications of digital photography.

Lenses: Normal, wide, Tele, zoom, PC and TS lens. Working of lens and angle of view of a lens.

Camera Controls: Shutter speed aperture exposure control, auto winder or motorized camera, depth of field, selective focus.

Exposure Meter: Incident meter and reflected meter.

Metering System: Center weighted Spot and Matrix metering.

Filters: UV Filter, Polarizing filter, special effect filters and tripod.

Composition: Creative Composition, rule of thirds and Golden section.

Managing Your Digital Assets: Managing digital cameras, Cleanness, Precautions, Managing Images printouts, Burning CDs.

Beyond the Basics: Camera Controls and Creativity, About Digital Photographs, Automatic all the way working of Digital Camera and comparison Selecting Images Size and Quality (Photoshop), Definition of shutter speed in detail, delineation of aperture, Using Shutter Speed in detail, definition of aperture, Selecting Exposure Modes, Types of Lenses.

UNIT-2

Photographing people: Photography aesthetics of people (Male, females, couples, groups & child Photography) in studio and outdoor and available light.
Product Photography: Using Selective Focus, Exposure affects you Images, Controlling Brightness and Contrast, Close up Photography.
Interior and Exteriors: Architectural photography, Industrial shooting (Internal & external) and use of various wide angle lenses. Landscape photography, science shorts.

UNIT-3

Action and Sports Photography: To capture the action in different ways to know the game first Selecting the equipments according to the game. (Usage of various zoom and tele- lenses and tripods)

UNIT-4

The Photo Shoot from Start to Finish: Photography on the given theme to selecting subject to select the equipment the location and finally shooting.

UNIT-5

Transferring Devices: ATA-Flash-Cards, The exchange of digital information between two or more computers. Data is usually transmitted via a direct cable connection, a computer network, AD conversion, I.C Cards PC-Card, ID Photo MO Disk. The smallest rewritable optical storage medium for digital cameras. A joint development from Olympus, Sanyo and Hitachi Maxell. It features an amazing capacity of 730 MB. This means about 2,000 photos can be taken before the media needs to be changed. Image converter Semiconductor-image converter (CCD chip). Image transmission/ transfer the digitization of images means they can be transmitted via data carriers or networks without the loss of quality or copied an infinite number of times.

Blue Tooth: Blue tooth carries a WAN concept to a small scale, low power 10 m range, also known as personal is networking (pan) Bluetooth Profile Dependencies, data transferring, connection, wireless signals. Bluetooth file transfer profile (FTP) - enables browsing of the file system of other Bluetooth devices which support Bluetooth FTP, serial port (SPP) provides a wireless serial connection to other Bluetooth devices, human interface device (HID) enables the use of Bluetooth input devices (keyboards and mice).

Data Cable: USB based wires with both ends with the commutability of USB with computers, palmtops, I-pods, to transfer the data from one device to another, compatibility with memory card readers pro, different devices in which data cable is used, use of data cable in internet browsing.

Pen Drive: Temporary storage devices, attach with computer, having USB head compatible plug and play utility. I-pods, Pen drives with music player option, pen drive capacity of data storage, software's of pen drive for win 98, formatting the pen drive, labeling the pen drive, handling and caring of the pen drive, diff brands dealing with pen drive.

CD Burning: CD writing, cd writing software's, making video of still images, making data cd, making the labels for the cd, formatting the re-writable cd, diff types of CD available, storage capacity of CD's , labeling the CD's, storing and handling the CD's, CD Burning.

UNIT-6

Project

MSAV 204 Introduction to Advertising & Market Research.

UNIT-1

Advertising: Meaning, Nature, Functions, Benefits, History, Nature (Art, Science, and Profession), Ethics in Advertisement. Social and Economic aspects in advertising.

Types of Advertising: (Classified advertisements, Display advertisements, Hard Sell advertisement, Soft sell advertisements, Reminder advertisements, Prestige advertisements, Humorous advertisements, Professional advertisements, National advertisements, Local advertisements, Global advertisements, Product Advertising, Service Advertising, Institutional Advertising, Consumer Advertising, Distributor Advertising, Retail Advertising, industrial Advertising, Educational Advertising, Financial Advertising, Travel and Entertainment Advertising, Co-operative Advertising, Advertising, by Government and Public Bodies).

UNIT-2

Advertisement relationship with the product life cycle.Advertisement as a communication tool. Marketing communication process. Advertisement as a Marketing Tool: Marketing, Marketing Mix, Advertisement and Product (Positioning and Packaging), Place, Price, Promotion. AIDA Model.

UNIT-3

Media Selection and Media Planning:
Types of Media: Newspapers, Television, Radio, Magazines, Web advertising, Exhibitions, Telemarketing, Posters and Hoardings.
Advertisement Campaign: Campaign Planning and Process.
Advertisement Agency: Structure, Client Agency Relationship, Agency Media Relationship, Compensation.
Advertisement Budget: Meaning & Methods.
Advertisement Copy & Layout Designing: Types of Advertisement Copy, Types of Headlines, Components of Layout.

UNIT-4

Production: Advertisement Production Process and Implementation, Typography.

UNIT-5

Research in advertising, planning, execution, copy research, market research; ethical aspects of advertising; law and advertising; advertising and pressure groups; emerging trends.

UNIT-6

Practical

MSAV 205 Introduction to 3D Animation.

UNIT-1

Overview of Animation
Overview of World Cinema & Animation, History of animation and its implementation, Development of Animation through time- manual to digital, Different Medium for making animation Pipeline for making an animation Film

UNIT-2

Basics of 3D
3D Production Pipeline, Concepts and methods of 3D Modeling
Basic Modeling
Introduction to Nurbs Curves, Nurbs surface editing, Polygon surface editing, Modifying and deforming geometry
Basic of Character Modeling
• Basic Character design and 3D Modeling using Poly character modeling

UNIT-3

Basic of Texture

Creating Texture Maps, BasicUv unwrap, Bump mapping, Procedural Texturing, Background Texturing

Basic of Lighting

Lighting Fundamentals, Light types, Attributes of Light, Lighting objects & Shadows, 3 Point Lighting, Lighting a character, Lighting a scene to matching the environment, To enlarge the repertoire of tools to create animation

UNIT-4

Rigging

Normal controller based rigging, TSM rigging, Binding, Set driven key and it's utilization on rigging,Weight paint

Basic of Animation

Key frame animation, Blocking, Breakdown, Primary motion, Secondary motion, Graph editor, Text editor, Dope sheet, Blend shape, Biped and quadruped movement, Lip sync and expression.

UNIT-5

Basic of Dynamics

Rigid body and soft body, Field, Fluid, Particle, Cloth, Hair and fur, Effects

Rendering

• Type of rendering, Render passes, GI and FG, AO

UNIT-6

- Practical

MSAV 206
Practical -1

MSAV 207
Practical -2

Third Sem.

MSAV 301 Digital Video & Sound Editing.

UNIT-1

Concept & Objectives of Editing, Software & tools, Continuity & Jerk Enter & Exit in Frame, Title, Credits & Sounds. Sound editing, mixing sound, laying sound tracks, syncing sound and picture.Capturing video. Editing techniques for News, Documentary and Fiction & Ad Film.

UNIT-2

Picture transitions and their use, Elements of the editing, motivation, information, shot composition sound, camera angle, continuity. Types of the editings, action edit, screen position edit, form edit, dynamic edit. Do's and don'ts of editing

UNIT-3

Voice over and sound bytes, dubbing and mixing of sound. Computer hardware for editing

UNIT-4

On line editing in a multi-camera TV programme production. TV Graphics and Animation: Theory and Practice .Elements of 2D Graphic Elements of 3D Graphics. 3D Modeling. 3D Animation .Special effects creation .Environmental special effects

Lighting camera & texturing .Introduction to virtual sets .Film Analysis: The Editor's point of view

Extensive sound recording, video editing, graphics and animation practicals. Participation in production exercises

UNIT-5

Introduction to sound: Sound, Digital sound files, different sound formats, midi & digital audio, creating digital audio files, sound producing, sound extracting, Advantages and disadvantages of midi &digital, choosing between midi and Digital audio.

Linking files: Sound for the World Wide Web, adding the sound to your multimedia project, production tips, audio recording, keeping track of your sound, testing and evaluation.

UNIT-6

Record clips & editing: Sound recording, editing digital recording, trimming, splicing and assembly, volume adjustments, format conversion, re sampling or downloading, fade-ins and fade -outs, equalization, time stretching, digital signal processing, reverting sound, making midi audio, audio file formats.

Special effects: Adding effect automation enveloping, adding a volume envelop, adding a panning envelop, previewing effect automation, applying effect automation, adjusting envelope, adding envelop points, flipping a envelop points, setting fade properties, cutting, copying, pasting, envelope points, adding mirror and wave hammer, pan to left , pan to right, dry out, wet out, convert mono to stereo, looping.

Finalize files: Burning the audio CD, mp3, making the remix sound track with using all the special FX from the software. Exporting the files in diff formats, save in wav, mp3 etc.

UNIT-7

Practical

MSAV 302 Advance 3D Animation (Modeling & Animation)

UNIT-1

Animation, multimedia & virtual reality: Fundamental key frame animation, repeating animation over time, Hierarchical linking, Key frame, Parameters Outof- Range, Setting Animation Keys, Animating the Rotation of the Dummy Object, Creating a continuously Looping Animation.

UNIT-2

Using advanced techniques: Assigning Constraints on the Motion Panel, Applying an Ease Curve to Control Animation, Multiplier curves, Link constraint, Inverse kinematics, Solver, Applying Multiplier Curves, and Switching Hierarchical Parents.

UNIT-3

Advanced Modeling: Editable poly, Symmetry modifier, Lathe modifier, Merge, Quad polygon, Settings dialog, NURMS, Editing Using Multiple Viewports, Adding Detail to the Model, Tessellate, Deformation, XRef, Using Modifiers to Add Detail to 3D Objects, Merging Files While Retaining a Connection.

UNIT-4

Advanced lighting effect: Placing and adjusting photometric lights, Using exposure control, Adjusting meshing parameters, Controlling color bleed and reflectance, Making materials act as lights, ttenuation, Direct illumination, Indirect illumination, Refine Iterations, Filtering, Reflectance, Placement and Adjustment, Applying Exposure Control, Setting Radiosity Meshing at the Local Level, Controlling Radiosity Using Materials. Applying Advanced Lighting Override Material.

UNIT-5

Advanced Animation: The Fundamentals of Hierarchical inking, Animation controllers, Track View Dope Sheet, Ease curves, Controllers, Constraints, Graph editors, Ease curves.

UNIT-6

Architectural modeling / industrial modeling and animation: Modeling the Building with exteriors and interiors, the lights should be properly placed in the scene. Modeling the Mech. components, for eg: - hand tools, Auto components & animating then with key framing.

UNIT-7

Preparation for Multimedia Development: Modeling a Project with a final output after using that software, TV Product Advt., News channel Logo Animation, Post production effects, Animated series, Montaz, Structural Modeling and animation.

UNIT-8

Practical

MSAV 303 Film Appreciation.

UNIT-1

Extension theory, what is film making all about?

UNIT-2

History of cinema, Ideology of filmmaker.

UNIT-3

Evolution of art forms in cinema, Montages vs. misc in scene, New wave cinema

UNIT-4

Film analysis, Current trends, Corporatization of Indian cinema industry

MSAV 304 Cinematography.

UNIT-1

Basic Still Photography

Cinematography derives most of its technical and artistic skill from the knowledge of still photography. It is through still photography that students understand basic ideas like framing, exposure, shutter speeds, depth of field and lensing. By learning to use the still camera well, students actually create for themselves a solid foundation of theoretical and practical knowledge, which they can build upon as they go on to movie cameras.

UNIT-2

History - Cinema and Cameras

Students are introduced to the art of Cinematography with its history and shown films in various genres. This encourages open discussion and also an exchange of ideas between the faculty and the class. Cinematography and its skills in the absence of present day technological advancements is a good way to learn how many optical effects were achieved through simple means without sophisticated gadgetry.

UNIT-3

Lensing

Lensing is directly connected to the emotional response of spectators. It is the lens that decides the image magnification, the depth of field, the area of coverage and the plane of focus.It is also the lens that helps us capture the subtle variations of light and textures. Students discover the artistic fundamentals of shot taking and are taught how lensing is the most crucial aspect of mise-en-scene as well as shot break down.

UNIT-4

Lighting

Lighting is different for diverse mediums and hence there are different lighting techniques for still photography, film and television. The parameters along with techniques of each are explained in detail.Students are taught to set up the shoots themselves and work on the textures of light. Students are given inputs in both indoor and outdoor lighting to enable them to respond to any kind of challenge in their professional life.

UNIT-5

Videography

When the image is acquired electronically, instead of the usual optical process then it is called videography. Students are taught the nitty gritty of how video signals are generated, amplified and recorded. They are also brought into contact with information about the various formats and resolutions in which video exists today.Apart from inputs in DV CAM, multicam setups, they are also given inputs into high end cameras like Red and various other HD cameras capable of 2k (film) resolution and the knowledge of 2k film transfer.

UNIT-6

Shooting for Chroma

Whenever it is found necessary to create a composite shot using two or more separate shots, the techniques of keying, matting and frame blending are used. Students are taught how to light up green/blue screens meant for chroma key effects and also give in inputs about matting and blending techniques.

UNIT-7
Practical

MSAV 305 Advance Cinematrics

UNIT-1
Maya foundation basics-theory

UNIT-2
Maya foundation primitive modeling-modeling a table,modeling a hut,modeling a robot

UNIT-3
Introduction to nurbs basics-theory

UNIT-4
Maya foundation nurbs modeling
Two objects

UNIT-5
Maya foundation polygon basics- theory

UNIT-6
Maya foundation polygon modling
Modeling an interior or cartoon character

UNIT-7
Practical

MSAV 306
Practical -1

MSAV 307
Practical -2

Forth sem.

MSAV 401 Advance 3D Animation (Modeling & Animation) II

UNIT-1
Conceptual knowledge of game creation Understand the history and evolution of game design and technology; Honing creativity, design, computer and problem-solving skills in the area of game Design

UNIT-2

Advanced Animation Character Animation - Walk cycle, Run cycle, Jumping, Timing, movement, mood, camera and lighting; Animation using weights, Character Rigging: Skeletons, Skinning and Constraints for controls; Forward Kinematics and Inverse Kinematics, Deformers

UNIT-3

Facial animation for lip synch; Non-Linear Animation (Trax editor), Animation Layering; Animation Planning; Secondary Animation

UNIT-4

Gaming Modeling and Animation High detail low poly modeling; Poly count; Z-brush / Maya Workflow; Knowledge of Python; Level of Detail

UNIT-5

Practical

MSAV 402 Cartoon Animation & Special Effects.

UNIT-1

Comparison between Animated & Realistically Animated Films: Watch the different animated flicks and make a comparison report on them.

UNIT-2

Timing & State: Watch the different animated flicks and make a comparison report on them.

UNIT-3

Movements in Animation: Understanding key frames, key frame animation, fine tuning the animation, Manual animation, path follow animation and frame rate of animation.

UNIT-4

Frames: Frame rate, resolution, size, video standards used worldwide, and fps.

UNIT-5
Digital Animation & Special Effects
Introduction to special Effects: Knowledge about effects, making effects, applying effects
Types of special effects: Particle system, masking, keying, color range, text effects, CG effects
Synchronization with editing: Tips and tricks for editing, advance knowledge about editing, compositing, Final endering (output)

MSAV 403 Dissertation & Viva

MSAV 404 Project- 2D Animation or 3D Animation

MSAV 405 Internship.