



Estd. 1916

Vishwavidyanilaya Karyasoudha
Crawford Hall, Mysuru- 570 005

No.AC6/387/2015-16

Dated: 25th May 2016

NOTIFICATION

Sub: Modification of Syllabus of Bachelor of Science-Animation and Multimedia from the academic year 2016-17.

- Ref: 1. Decision of the Faculty of Commerce Meeting held on 19th February 2016.
2. Decision of the Academic Council Meeting held on 29th March 2016.F

The Board of studies in Animation and Multimedia has recommended to modify the syllabus of Bachelor of Science (Animation and Multimedia) from the academic year 2016-17.

The Faculty of Commerce and the Academic Council at their Meetings held on 19th February 2016 and 29th March 2016 respectively have also approved the above said proposal and it is hereby notified.

The revised syllabus copy of the Bachelor of Science-Animation and Multimedia is annexed.

The contents may be downloaded from the University Website i.e., www.uni-mysore.ac.in

Draft Approved by the Registrar

[Signature]
Deputy Registrar (Academic)

To:

- 1) The Dean, Faculty of Commerce, Post Graduate Centre, Hemagangotri, Hassan.
- 2) The Chairman, Department of Studies in Commerce, Manasagangotri, Mysuru.
- 3) The Chairman, Board of Studies in Business Administration, BIMS, MGM.
- 4) The Chairman, Department of Studies in Business Administration, BIMS, MGM.
- 5) The Chairman, Board of Studies in Commerce (UG), DOS in Commerce, MGM.
- 6) The Co-ordinator, Directorate of Out Reach and Online Programme, Parakalamath, MGM.
- 7) All the Principals of Affiliated Colleges running Under Graduate Programme.
- 8) The Director, College Development Council, Maharaja College Centenary Building, University of Mysore, Mysuru.
- 9) The Deputy Registrar/Assistant Registrar/Superintendent, Administrative Branch, Academic Section, University of Mysore, Mysuru.
- 10) The Deputy Registrar/Assistant Registrar/Superintendent (Evaluation), UOM, Mysuru.
- 11) The PA to Vice-Chancellor/Registrar/Registrar (Evaluation), UOM, Mysuru.
- 12) Office Copy.

Commerce Noti. - Ja

REGULATIONS FOR

B.Sc., in

Animation & Multimedia

(Under specialized program)

1. Course title:

The program shall be called as **B.Sc., in Animation and Multimedia.**

It is three years program consisting of six semesters; two semesters in each year. Candidate admitted to this course shall be governed by following rules and regulations.

2. Eligibility, mode of selection

- a. A candidate passed in 10+2 standard or equivalent (any stream) from a recognized board is eligible for admission to the first semester of the program.
- b. Eligibility for lateral admission to 2nd year B.Sc., (A&M) 3 years diploma in Animation and Multimedia from recognised Technical Board
- a. Eligibility is as per the norms of University of Mysore and Govt of Karnataka.
- b. There shall be a total intake of 40 candidates, any excess intake shall be considered only after taking approval from the university duly observing all the formalities.

3. Course content:

The course of study for the B.Sc., A&M (Animation and Multimedia) comprises theory, practical, computer skills, internship, project work and production house visit. The academic calendar shall be as notified by the university from time to time. Pedagogy includes PowerPoint Presentation, lecturing, case studies, group discussion, seminars and computer practical. Animation movies and games, hands on practice.

4. Medium of instruction: -English.

5. Attendance and conduct

- a. Each semester shall be taken as a unit for the purpose of calculating attendance.
- b. The students shall attend practical and theory classes as prescribed by the University during each semester.
- c. Minimum attendance of 75% of actual working hours is required in each paper, a student who doesn't satisfy the requirement of attendance shall not be permitted to write the examination in concerned subject.
- d. If the conduct/behaviour of the student is not found to be satisfactory, action will be initiated as per the University regulations.
- e. A candidate can take a maximum of six years for completion as per double the duration norms of University of Mysore.

6. Formation of Board of Examiners

- Chairman Board of Studies shall form Board of Examiners members consisting of Principal Partnership Institution, Head of the Concerned Department, Subject Faculties and University Representatives. The duties of Board of Examiners include setting question papers, conducting the examinations, valuation of answer scripts and submitting the marks list to University for result announcement.
- Question paper:** Three sets of question papers shall be submitted by the subject faculty one month in advance both in hard and soft copies.
- Valuation:** Valuation will be conducted by respective subject experts selected by BOE.

7. Scheme of examination

- There shall be a University examination at the end of each semester.
- There shall be a term end examination of 3 hrs duration for each theory subject and 4 hrs duration for practical subject at the end of the semester except project VIVA VOCE
- Repeaters have to take examination during respective semesters only.
- Each subject is divided into continuous assessment and end term exam with marks allotted as shown below

a) Total Marks -Theory papers	100 marks
i. External examination:	70 marks
ii. Continues Assessment	30 marks
Continues Assessment (1 st to 8 th week)	15 marks
Continues Assessment (9 th to 16 th week)	15 marks

(Continues assessment includes, Tests, Presentations, Assignments, Project work and Portfolio's)

- Each student has to score minimum of 40% in each papers.

b) Total marks –Practical papers	100 marks
i. External examination:	70 marks
ii. Continues Assessment	30 marks
Continues Assessment (1 st to 8 th week)	15 marks
Continues Assessment (9 th to 16 th week)	15 marks

(Continues assessment includes, Tests, Presentations, Assignments, Project work and Portfolio's)

- Each student has to score minimum of 40% in each papers.

c) Internship:

- During 6th semester 45 days internship shall be carried out by student and report to the academic guide on weekly basis
- Continuous Assessment will be evaluated for 30 marks by internal guide after completion of 4th and 8th week.
- Each internship report shall be evaluated for 40 marks by internal guide
- A VIVA VOCE for 30 marks will be conducted by internal and external examiner selected by BOE

d) Project work

- During the 6th semester after completion of internship program students shall work on project under the guidance of allotted guide
- Continuous assessment will be evaluated for 30 marks by internal guide assessed after completion of 12th and 16th week
- Each project report and portfolio will be evaluated for 40 marks by internal guide
- A VIVA VOCE for 30 marks will be conducted by internal and external examiner selected by BOE

8. Declaration of results:

- Within 30 days of completion of examination, result sheets shall be submitted to the University for Approval and announcement. .
- If the students wish to apply for revaluation the same will be done after collecting nominal fees of Rs 500/- per paper
- If the students wish to apply for challenge revaluation, the BOE appoints the subject expert to evaluate after collecting nominal fees of Rs 3000/- per paper.
- The results and grades of the B.Sc., (Animation and Multimedia) shall be declared as per the regulations of the Choice Based Credit System of University of Mysore.

9. Scheme of academics

I SEMESTER

Paper	Title of the paper	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
AM 1.1	ENGLISH	3	0	0	3	30		70	28			100	40
AM 1.2	LANGUAGE	3	0	0	3	30		70	28			100	40
AM 1.3	SKETCHING (Practical)	0	1	3	4	30				70	28	100	40
AM 1.4	STORYBOARDING (Practical)	0	1	3	4	30				70	28	100	40
AM 1.5	FUNDAMENTALS OF COMPUTER	3	0	0	3	30		70	28			100	40
AM 1.6	INDIAN CONSTITUTION AND ETHICS	3	0	0	3	30		70	28			100	40
	TOTAL				20							600	

II SEMESTER

Paper	Title of the paper	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
AM 2.1	ENGLISH	3	0	0	3	30		70	28			100	40
AM 2.2	LANGUAGE	3	0	0	3	30		70	28			100	40
AM 2.3	HISTORY AND PRINCIPLES OF ANIMATION (Practical)	0	1	3	4	30				70	28	100	40
AM 2.4	FUNDAMENTALS OF DESIGN	3	0	0	3	30		70	28			100	40
AM 2.5	MULTIMEDIA APPLICATIONS AND GRAPHIC DESIGN (Practical)	0	1	3	4	30				70	28	100	40
AM 2.6	ENVIRONMENTAL STUDIES	3	0	0	3	30		70	28			100	40
	TOTAL				20							600	

III SEMESTER

Paper	Title of the paper	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
AM 3.1	ENGLISH	3	0	0	3	30		70	28			100	40
AM 3.2	LANGUAGE	3	0	0	3	30		70	28			100	40
AM 3.3	WEB DESIGNING (Practical)	0	1	3	4	30				70	28	100	40
AM 3.4	MANAGEMENT OF ORGANISATION	3	0	0	3	30		70	28			100	40
AM 3.5	PRODUCTION PIPELINE	3	0	0	3	30		70	28			100	40
AM 3.6	FUNDAMENTALS OF GAME TECHNOLOGY	4	0	0	4	30		70	28			100	40
	TOTAL				20							600	

IV SEMESTER

Paper	Title of the paper	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
AM 4.1	ENGLISH	3	0	0	3	30		70	28			100	40
AM 4.2	LANGUAGE	3	0	0	3	30		70	28			100	40
AM 4.3	DIGITAL FILM MAKING PROCESS (Practical)	0	1	3	4	30				70	28	100	40
AM 4.4	AUDIO AND VIDEO EDITING, VISUAL EFFECTS AND COMPOSITING-I (Practical)	0	1	3	4	30				70	28	100	40
AM 4.5	CLAY MODELLING (Practical)	0	1	2	3	30				70	28	100	40
AM 4.6	ENTREPRENEURSHIP DEVELOPMENT	3	0	0	3	30		70	28			100	40
	TOTAL				20							600	

V SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
AM 5.1	3D MODELLING (Practical)	0	1	2	3	30				70	28	100	40
AM 5.2	TEXTURING (Practical)	0	1	2	3	30				70	28	100	40
AM 5.3	DYNAMICS (Practical)	0	1	2	3	30				70	28	100	40
M 5.4	RIGGING AND ANIMATION (Practical)	0	1	2	3	30				70	28	100	40
AM 5.5	LIGHTING AND RENDERING (Practical)	0	1	3	4	30				70	28	100	40
AM 5.6	VISUAL EFFECTS AND COMPOSITING-II (Practical)	0	1	3	4	30				70	28	100	40
	TOTAL				20							600	

VI SEMESTER

PAPER	TITLE OF THE PAPER	Credits			Credits	Marks						Total	
		L	T	P		CA		Theory exam		Practical exam			
						Max	Min	Max	Min	Max	Min	Max	Min
AM 6.1	INTERNSHIP PROGRAMME	0	5	5	10	30		Each internship report shall be evaluated for 40 marks by internal guide A VIVA VOCE for 30 marks will be conducted by internal and external examiner selected by BOE, minimum marks 28				100	40
AM 6.2	PROJECT REPORT	0	5	5	10	30		Each project report and portfolio will be evaluated for 40 marks by internal guide A VIVA VOCE for 30 marks will be conducted by internal and external examiner selected by BOE, minimum marks 28				100	40
	TOTAL				20							200	

SEMESTER – I

Objective:

- An introduction to the field of Animation and to know the techniques of Illustrating imaginative characters or the background with the proportions to showcase their creativity.
- To understand the planning of an actual output of an Advertisement, a Short film and a Movie.
- To familiarise on the judicial, parliamentary affairs of Indian political system.
- To train on the basic fundamentals of computer, this in future enhances the skills for Animation & Multimedia.

Paper code: AM1.1

ENGLISH

Total Hrs: 48

As per Mysore university syllabus

Paper code: AM1.2

LANGUAGE

Total Hrs: 48

As per Mysore university syllabus

SKETCHING

Paper code: AM 1.3

Duration: 105 Hours

Unit 1

Basics Drawing

Basic forms or shapes, Line of action, Silhouette

Unit 2

Sketching parts of character

Drawing cartoon face, Hands, Legs, Body, Facial expressions

Unit 3

Background sketching

Perspective drawings (1pt, 2pt and 3pt), Objective drawings

Unit 4

Anatomy

Human Anatomy (Male, Female and Child), Animal anatomy

REFERENCE BOOKS:

1. Giovanni Civardi, *Drawing Hands and Feet: Form, Proportions, Gestures and Actions (The Art of Drawing)* - Search Press (June 1, 2005)
2. Tom Richardson, *The Art Student's Guide To The Proportions Of The Human Form* - Tom Richardson (November 3, 2008)
3. Preston Blair, *Cartoon Animation (Collector's Series)* – Walter Foster Publishing; 1 edition (1994)

STORY BOARDING

Paper code: AM 1.4

Duration: 60 Hours

Unit 1

Camera angles planning

Camera Angles, Camera Movements, Camera Shots

Unit 2:

Stages of Storyboarding

Story development, Script writing, Scene planning, Writing storyboard

Unit 3:

Video Storyboard

Animatics

Unit 4:

Designing

Character designing, Background designing

REFERENCE BOOKS:

1. Anson Jew and Sergio Paez , *Professional Storyboarding: Rules of Thumb* - Focal Press; 1 edition (December 21, 2012)
2. Mark A. Simon, *Storyboards: Motion In Art* - Focal Press; 3rd edition (October 13, 2006)

COMPUTER FUNDAMENTALS

Paper code: AM 1.5

Duration: 60 Hours

Unit 1:

Introduction

Introduction and basic concepts of computer, Development of computer systems, Generations of computer, Applications of Computer, Input/Output devices, Types of computer- Super Computer, Mainframe Computer, Mini Computer, Micro Computer, Components of a computer.

Unit 2:

Primary and secondary devices

Computer Storage, Computer memory, RAM, ROM, Secondary storage devices, Hardware and software, Types of software, System software- Computer languages, Translators, Application software's, Operating systems.

Unit 3:

Networking Topologies

Computer Networking, Types of Networks- LAN, WAN, MAN, Internet and intranet, connecting to Internet, Internet Applications, Search Engines, and Network Topology.

Unit 4:

Database

Database, Elements of database, Database Management System, Types of Database Management Systems, Applications of DBMS, Database Administrator, Data warehouse.

Unit 5:

Software

DOS (Disk operating system), Command prompt, Microsoft Office, MS word, MS Excel, Basic Functions, Microsoft PowerPoint, Computer Aided Design, Electronic Data processing.

Unit 6:

Computer Security

Computer Security & Ethics, Issues and Internet Privacy, Computer Viruses, Spyware and malware, Security solutions, Disaster Recovery.

REFERENCE BOOKS:

1. HK Gundu Rao, N.S Manjunath & M.N Nachappa, *Computer Fundamentals* - Sumukha Publications, Third Edition.
2. Pradeep K. Sinha & Priti Sinha, *Computer Fundamentals* - BPB Publications, 6th edition.
3. V. Rajaraman, *Fundamentals of Computers* - PHI Publications.
4. Anita Goel, *Computer Fundamentals* - Pearson Publications.
5. E Balagurusamy, *Fundamentals of Computers* - McGraw Hill Education, 2009.
6. Reema Thareja, *Fundamentals of Computers* - Oxford Publications.
7. Vishal Soni, *Fundamentals of Computers* - Himalaya Publishing House.

Paper code: AM 1.6**INDIAN CONSTITUTION****Duration:** 45 Hours

As per Mysore university syllabus

SEMESTER – II

Objective:

- To acquire the knowledge comprising history and the ancient techniques of Animation and its concepts to create Animation work.
- To convert the sketches into a video format as an output.
- To understand Multimedia and the conceptualization for an attractive design and to design a variety of graphics for various fields.
- To provide an basic knowledge about the ecological factors in general.

Paper code: AM 2.1

ENGLISH

Total Hrs: 48

As per Mysore university syllabus

Paper code: AM 2.2

LANGUAGE

Total Hrs: 48

As per Mysore university syllabus

HISTORY AND PRINCIPLES OF ANIMATION

Paper code: AM 2.3

Duration: 120 Hours

Unit 1:

History of Animation

World history of Animation

Unit 2:

Techniques of Animation

Types of Animation and techniques

Unit 3:

Principles of Animation

12 Principles of Animation, Flash Animation

Unit 4:

Data preparation

X-Sheet

REFERENCE BOOKS:

1. Richard E. Williams, *The Animator's Survival Kit* - Faber & Faber; 4 edition (September 25, 2012)
2. Stephen Cavalier, *The World History of Animation* - University of California Press (September 9, 2011)
3. Charles Solomon, *Enchanted Drawings: The History of Animation* - Random House Value Publishing; Revised edition (October 16, 1994)

FUNDAMENTALS OF DESIGN

Paper code: AM 2.4

Duration: 60 Hours

Unit 1:

Design concepts

Design Theory, Harmony and symmetry, Direction, Repetition

Unit 2:

Colour and Texture

Colour Theory, Contrast, Balance, Texture and pattern

Unit 3:

Types of Graphics

Typography, Type phases, Graphics

Unit 4:

Preparation of Graphics

Alignment and spacing, Size and proportion

REFERENCE BOOKS:

1. Rose Gonnella, Christopher Navetta, Max Friedman, *Design Fundamentals: Notes on Visual Elements and Principles of Composition* – Peachpit Press; 1 edition (February 4, 2015)
2. Alan Hashimoto and Mike Clayton, *Visual Design Fundamentals: A Digital Approach* - Cengage Learning; 3 edition (January 16, 2009)
3. Gerald F. Brommer, *Illustrated Elements of Art and Principles of Design* - Crystal Productions; Spi edition (January 7, 2011)

MULTIMEDIA APPLICATIONS AND GRAPHIC DESIGN

Paper code: AM 2.5

Duration: 120 Hours

Unit 1:

Multimedia Applications

Media and data streams, Sound/Audio, Images and graphics, Video and Animation, Data compression, User interface, Synchronization, Multimedia applications

Unit 2:

Image editing

Digital painting, Matte painting, Colour correction

Unit 3:

Designing

Logo Designing, Brochure Designing, Banner designing, Visiting card designing

Unit 4:

Design publishing

Designing E-Book, Exporting file into different file formats

Software covered: Adobe Photoshop, Adobe Light room, Adobe Illustrator, Corel Draw

REFERENCE BOOKS:

1. Ralf Steinmetz and Klara Nahrstedt, *Multimedia Applications* - Springer; 2004 edition (April 28, 2004)
2. Andrew Faulkner and Brie Gyncild, *Adobe Photoshop CC Classroom in a Book* - Adobe Press; 1 edition (August 4, 2014)
3. Kelly Kordes Anton and John Cruise, *Adobe In design CC Classroom in a Book* - Adobe Creative Team
4. Brian Wood, *Adobe Illustrator CC Classroom in a Book* - Adobe Press; 1 edition (November 9, 2014)
5. Gary David Bouton, *Coreldraw X7: The official Guide* - McGraw-Hill Education; 11 edition (October 17, 2014)
6. Alex W. White, *The Elements of Graphic Design* - Allworth Press; Second Edition edition (March 15, 2011)

Paper code: AM 2.6

ENVIRONMENTAL SCIENCE

Duration: 45 Hours

As per Mysore University syllabus

SEMESTER – III

Objective:

- To understand the importance of the web as a medium of communication and able to design websites as per desired requirements.
- To be able to adopt industry procedures and techniques.
- To get familiarized with the world of virtual gaming experience.
- To adopt certain Management criteria Principles (Organisation structure, team work, plan of a task force) in the field Animated Arena.

Paper code: AM 3.1

ENGLISH

Total Hrs: 48

As per Mysore university syllabus

Paper code: AM 3.2

LANGUAGE

Total Hrs: 48

As per Mysore university syllabus

WEB DESIGNING

Paper code: AM 3.3

Duration: 120 Hours

Unit 1:

Web design

Web page design

Unit 2:

Web publishing

Creating web page, Linking/attaching audio and video files to the web page, creating web pages with compatibility

Unit 3:

Web script

Action Script

Unit 4:

Web basics

Basics of HTML, Basics of CSS

Software covered: Adobe Flash, Adobe Dreamweaver

Reference books

1. Russell Chun, *Adobe Flash Professional CC Classroom in a Book* - Adobe Press; 1 edition (August 21, 2014)
2. Adobe Creative Team, *Adobe Dreamweaver CC Classroom in a Book* - Adobe Press; 1 edition (July 25, 2013)

MANAGEMENT OF ORGANISATION

Paper code: AM3.4

OBJECTIVE:

The objective of this course is to familiarize the students with the basic Management concepts. It deals with the evolution and development of Management thoughts, nature and description of managerial functions.

Unit 1

Introduction

History of management thought, Role of a manager, managerial level and skills, managerial functions- Leadership, Leader vs. Manager, types of leaders, effective leadership

Unit 2

Planning and Management

Definition – meaning – importance, types of plans, process of planning, Management by objectives process of management, strengths and limitations.

Unit 3

Organization, Control and coordination

Organization structure, different types of structures, organizational design process, Controlling- process types of control, importance of control in management, Coordination- need for coordination- effective coordination- principles of coordination

Unit 4

Decision making and problem solving

Introduction to problem solving and decision making, types of decision- programmed and non-programmed, Decision making stages, Decision making steps, Cognitive and personal Biases, Post decision analysis

Unit 5:

Foundations of Individual Behaviour: Individual behaviour: Foundations of individual behaviour. Ability: Intellectual abilities, Physical ability, the role of disabilities.

Personality: Meaning, formation, determinants, traits of personality, big five and MBTI, personality attributes influencing OB.

Attitude: Formation, components of attitudes, relation between attitude and behaviour.

Perception: Process of perception, factors influencing perception, link between perception and individual decision making.

Emotions: Affect, mood and emotion and their significance, basic emotions, emotional intelligence, self-awareness, self-management, social awareness, relationship management.

Unit 6:

Motivation and Leadership:

Motivation: Meaning, theories of motivation-needs theory, two factor theory, Theory X and Y, application of motivational theories.

Leadership: Meaning, styles of leadership, leadership theories, trait theory, behavioural theories, managerial grid, situational theories-Fiedler's model, SLT, transactional and transformation leadership.

Reference Books

1. Koontz, *Essentials of Management*, 8/e, McGraw Hill
2. VSP Rao, *Management: Text and Cases* Excel BOOKS
3. Chuck Williams, An *Innovative approach to teaching and learning Principles of Management*, Cengage Publications, 2010
4. Kiran Nerkar, *Principles and practices of Management*, Vilas Chopde, Dreamtech Press, 2011
5. Stephen P Robbins, Timothy A. Judge, *Organizational behaviour*., Neharika Vohra, 14th Edition, Pearson, 2012.
6. Michael Butler, *Introduction to Organisational Behaviour*, Jaico Publishing House,
7. Ashwathappa, *Organization Behaviour*, Himalaya Publication House

PRODUCTION PIPELINE

Paper code: AM 3.5

Duration: 60 Hours

Unit 1

Introduction

Stages of Production

Unit 2

Functionality

Asset creation for Film and Game, The basic functionality of a pipeline, Software for a studio environment

Unit 3

Management application

Data management, Production management

Unit 4

Output

Interlude: Virtual Production in Film and Games, Upcoming Trends and Technologies, Interlude: Cloud computing for VFX

Reference Books

1. Renee Dunlop, *Production Pipeline Fundamentals for Film and Games* - Focal Press
(February 3, 2014)

FUNDAMENTALS OF GAME TECHNOLOGY

Paper code: AM 3.6

Duration: 60 Hours

Unit 1

Introduction

What is Game and its types, Conventional games versus Video games, The influences of storytelling in a Digital Universe, Video game story structure and work approach, Game concepts

Unit 2

Game theory

Game story theory and Dialogue, Stages of the design process, General principles of Level designing, Game balancing

Unit 3

Genre and UI

What is a Genre, The classic game genre, Design document, Creating User experience, Design issues for online gaming, Video game construction techniques and strategies, End game: wrapping it up

Unit 4

Designing

Game Designing (3DS Max)

REFERENCE BOOKS:

1. Flint Dille and John Zuur Platten, *The Ultimate Guide to Video Game Writing and Design* - Lone Eagle (January 8, 2008)
2. Ernest Adams, *Fundamentals of Game Design* - New Riders; 3 edition (December 27, 2013)

SEMESTER – IV

Objective:

- To prepare for digital encounter with film making process, usage of the studio tools and professional cameras.
- To apply the technique of creating hyper realistic videos from the creator's perspective before presenting in front of audience.
- To train the students on Entrepreneurs skills based on current trends & technology in Multimedia.

Paper code: AM4.1

ENGLISH

Total Hrs: 48

As per Mysore university syllabus

Paper code: AM4.2

LANGUAGE

Total Hrs: 48

As per Mysore university syllabus

DIGITAL FILM MAKING PROCESS

Paper code: AM 4.3

Duration: 120 Hours

Unit 1

Introduction

Writing and scheduling, Choosing a camera

Unit 2

Camera Techniques

Planning a Shoot, Using Camera, Lighting

Unit 3

Handling cameras

Shooting and Directing, DSLRs and other advanced shooting solutions

Unit 4

Editing

Color correction, Titles and effects, Finishing

REFERENCE BOOKS

1. Sonja Schenk and Ben Long, *The Digital Filmmaking Handbook* - Cengage Learning PTR; 5 edition (July 3, 2014)
2. Robert M. Goodman and Patrick McGrath, *Editing Digital Video : The Complete Creative and Technical Guide* – McGraw-Hill Education TAB; 1 edition (October 1, 2002)
3. Simon Langford, *Digital Audio Editing: Correcting and Enhancing Audio in Pro Tools, Logic Pro, Cubase, and Studio One* - Focal Press; 1 edition (October 7, 2013)

AUDIO AND VIDEO EDITING, VISUAL EFFECTS AND COMPOSITING-1,

Paper code: AM 4.4

Duration: 120 Hours

Unit 1

Introduction

Introduction to VFX, Creating compositions, Rotoscopy, Chroma Keying, Motion tracking, Wire/Rig removal

Unit 2:

Painting techniques

Color correction, Matte painting, 2D Compositing, Motion graphics

Unit 3

Audio and Video

Recording Audio, Recording Video, Introduction to editing, Types of editing

Unit 4

Editing

Creating Samples, Creating Bins, Noise reduction, Lip sync, Synchronizing Audio and Video, Rendering into different file formats

Software covered: Adobe After effects, Adobe Premier Pro, Adobe Audition

REFERENCE BOOKS:

1. David B. Mattingly, *The Digital Matte Painting Handbook* - Sybex; 1 edition (April 12, 2011)
2. Jon Gress, *[digital] Visual Effects and Compositing* - New Riders; 1 edition (November 1, 2014)
3. Benjamin Bratt, **Rotoscoping: Techniques and Tools for the Aspiring Artist** - Focal Press; 1 edition (February 23, 2011)
4. Ron Brinkmann, *The Art and Science of Digital Compositing: Techniques for Visual Effects, Animation and Motion Graphics (The Morgan Kaufmann Series in Computer Graphics)* - Morgan Kaufmann; 2 edition (June 4, 2008)

5. Maxim Jago, *Adobe Premier Pro CC Classroom in a Book* - Adobe Press; 1 edition (September 26, 2015)
6. Andrew Faulkner and Brie Gyncild, *Adobe After effects CC Classroom in a Book* - Adobe Press; 1 edition (December 26, 2014)
7. Adobe Creative Team, *Adobe Audition CC Classroom in a Book* - Adobe Press; 1 edition (June 28, 2013)

CLAY MODELING

Paper code: AM 4.5

Duration: 90 Hours

Unit 1

History

History of sculpture and its basic concepts

Unit 2

Study of characters

Head Study, Study of structures and anatomy

Unit 3

Base structure

Creating armature for Sculpture, Adding volume to the armature and posing it well

Unit 4:

Sculpting

REFERENCE BOOKS

1. Alex Irvine, *Ceramic Sculpture: Making Faces: A Guide to Modeling the Head and Face with Clay* - Lark Crafts (July 1, 2014)
2. Peter Rubino and Dave Brubeck, *Sculpting the Figure in Clay: An Artistic and Technical Journey to Understanding the Creative and Dynamic Forces in Figurative Sculpture* - Watson-Guptill; 1 edition (April 20, 2010)
3. Claire Waite Brown, *The Sculpting Techniques Bible: An Essential Illustrated Reference for Both Beginner and Experienced Sculptors* - Chartwell Books (September 8, 2006)

ENTREPRENEURSHIP DEVELOPMENT

Paper code: AM 4.6

Duration: 60 Hours

OBJECTIVE

The objective of this course is to impart the knowledge required to setup an entrepreneurship enterprise. Students will learn about the advantages and the methods for being a successful entrepreneur.

Unit 1

Introduction

Nature and development of entrepreneurship, meaning of entrepreneur, entrepreneurship, enterprise, Meaning of self-employment, employment and entrepreneurship, Entrepreneurial competencies- charm of being an entrepreneur, entrepreneurship for career growth, and support for self-employment, Brief history of entrepreneurship development in India.

Unit 2

Motivation techniques

goal setting techniques, systematic planning, self assessment techniques, Risk taking, Tolerance for ambiguity, Business planning

Creativity for Entrepreneurial Excellence, Business Research Methods, Business Environment & Finance, Quantitative Techniques, Marketing Management, Human Resource Management

Unit 3

Steps in launching an enterprise

Market survey- concepts and practices, assessment of demand and supply, preparation of survey questionnaire, Business plan preparation- detailed project report, small and medium enterprises- meaning, definition, importance, problems and prospects, Impact of WTO on small and medium enterprises. Industrial sickness-cause and remedies

Unit -4

Marketing and Manpower Planning

Marketing plan -marketing research for the new venture; steps in preparing marketing plan, contingency planning; organizational plan – form of ownership; designing organization structure, job design,

manpower planning; financial plan; cash budget, working capital; proforma income statement; proforma cash flow, proforma balance sheet, break even analysis;

Unit -5

Small Scale Industries and Financial Institutions

Meaning and Growth of MSEs; Small Scale Industries; Significance; problems and remedies; Industrial Policies; foreign direct investment (FDI); Sources of finance, debt or equity financing, commercial banks; venture capital, Financial Institutions supports Entrepreneurs,

Unit -6

National Skill Development Programs for Entrepreneurship

National Policy for the Development of Women Entrepreneurs in India; National Skill Development; Skill Development in India: Vocational Education and Training System; supporting entrepreneurs

Reference books

1. Allen, Kathleen R, *Growing And Managing a Small Business An Entrepreneurial Perspective* - Houghton Mifflin College Div
2. Madhurima Lall & Shika Sahai, *Entrepreneurship*, Excel Publication, 2nd edition
3. Arun Mittal & S L Gupta, *Entrepreneurship Development* - International Book House Pvt. Ltd. (2011)
4. G.R Krishna, Nobert Koubek, A.K. Singh, Nagendra.S, *Entrepreneurship And Development* - Edited Book, SITA publications , Mumbai, 2011
5. Rajeev Roy, *Entrepreneurship* Oxford Higher Education, Aug-2011

SEMESTER – V

Objective:

- To provide insights to the actual 3Dimensional (3D) world by working intricately on the features of the characters, Sculpting, 3D Modelling, Dynamics, Rigging, Animation, Lighting and Rendering.

3D MODELLING

Paper code: AM 5.1

Duration: 120 Hours

Unit 1

Introduction

Introduction to Modelling, Creating objects, Polygon modelling

Unit 2

Types of modelling

Nurbs modelling

Unit 3

Types of modelling

Sub division modelling

Unit 4

Managing poly counts

Working on model with given poly count (Low/High poly count)

REFERENCE BOOKS

1. Kelly Murdock, *Autodesk Maya 2016 Basics Guide* - SDC Publications; Pap/Psc edition (September 28, 2015)
2. Michael McKinley, *Maya Studio Projects: Game Environments and Props 1st Edition* - Sybex; 1 edition (March 1, 2010)
3. William Vaughan, *Digital Modeling 1st Edition* - New Riders; 1 edition (January 2, 2012)

TEXTURING

Paper code: AM 5.2

Duration: 60 Hours

Unit 1

Introduction

Introduction to Materials and Texturing

Unit 2

Types of materials

Understanding kinds of materials

Unit 3

Aligning textures

Mapping

Unwrapping the model

Unit 4

Create textures

Paint the texture

REFERENCE BOOKS

1. Lee Lanier, *Advanced Maya Texturing and Lighting* - Sybex; 2 edition (August 11, 2008)
2. Lee Lanier, *Maya Studio Projects Texturing and Lighting* - Sybex; 1 edition (May 31, 2011)
3. Lee Lanier, *Advanced Maya Texturing and Lighting* - Sybex; 3rd Revised edition edition (May 1, 2015)
4. Jahirul Amin and 3dtotal Publishing, *Beginner's Guide to Character Creation in Maya* - 3DTotal Publishing (May 12, 2015)

DYNAMICS

Paper code: AM 5.3

Duration: 60 Hours

Unit 1

Introduction

Introduction to dynamics/particles, Controlling emitters and particles, Introduction to fluids

Unit 2

Introduction

Introduction and simulation of soft and rigid body

Unit 3

Hair and Fur

Introduction to Hair and Fur, Simulation of Hair and Fur

Unit 4

Cloth

Introduction to Cloth, Simulation of Cloth

REFERENCE BOOKS

1. Todd Palamar, *Maya Studio Projects: Dynamics* - Sybex; 1 edition (November 2, 2009)
2. Eric Keller, *Maya Visual Effects The Innovator's Guide: Autodesk Official Press* - Sybex; 2 edition (May 13, 2013)
3. Lee Lanier, *Creating Visual Effects in Maya: Fire, Water, Debris, and Destruction* - Focal Press; Pap/Psc edition (March 20, 2014)
4. Antonia E. Foias, *Ancient Maya Political Dynamics (Maya Studies)* - University Press of Florida; Reprint edition (November 11, 2014)
5. Todd Palamar, *Maya Studio Projects Photorealistic Characters* - Sybex; 1 edition (May 17, 2011)

RIGGING AND ANIMATION

Paper code: AM 5.4

Duration: 60 Hours

Unit 1

Introduction to Rigging

Study of bones, Creating bone setup

Unit 2

Types of Rig

Working with muscular rigs, Working with deformers, Giving controls

Unit 3

Introduction to skinning

Binding skin to the rig, Controlling skin weights

Unit 4

Animation

Introduction to Animation, Biped animation, Animation for the rigged character done by students, Working with Graph editor and dope sheet

REFERENCE BOOKS

1. Tina O'Hailey, *Rig it Right! Maya Animation Rigging Concepts (Computers and People)* - Focal Press; 1 edition (February 26, 2013)
2. Kiaran Ritchie, *Jake Callery and Karim Biri, The Art of Rigging (A Definitive Guide to Character Technical Direction with Alias Maya, Volume 1)* - CG Toolkit (2005)
3. David Rodriguez, *Animation Methods - Rigging Made Easy: Rig your first 3D Character in Maya* - CreateSpace Independent Publishing Platform (April 18, 2013)
4. Roger King, *3D Animation for the Raw Beginner Using Maya (Chapman & Hall/CRC Computer Graphics, Geometric Modeling, and Animation)* - Chapman and Hall/CRC; 1 edition (August 15, 2014)
5. Keith Osborn, *Cartoon Character Animation with Maya: Mastering the Art of Exaggerated Animation (Required Reading Range)* - Fairchild Books (October 8, 2015)
6. Kenny Roy, *How to Cheat in Maya 2014: Tools and Techniques for Character Animation* - Focal Press; 1 edition (September 3, 2013)

LIGHTING AND RENDERING

Paper code: AM 5.5

Duration: 60 Hours

Unit 1

Introduction to Lights, Definition and properties of light

Unit 2:

2 point and 3 point lighting, Sun light

Unit 3:

Introduction to Rendering

Unit 4:

Mental ray rendering, V- ray rendering

REFERENCE BOOKS

1. Jeremy Birn, *Digital Lighting and Rendering (3rd Edition) (Voices That Matter)* - New Riders;
3 edition (November 21, 2013)

VISUAL EFFECTS AND COMPOSITING-2

Paper code: AM 5.6

Duration: 60 Hours

Unit 1

Introduction

Introduction and overview, Character setup, Control rig, Parenting and Aligning objects, Working with skeletons

Unit 2

Motion Captures

Motion capture data to a character, Rigid body dynamics, Creating custom camera

Unit 3:

Compositing

3D Compositing, Rendering out movies for previews

Unit 4:

Rendering and output

Working on render passes, Compositing 3D characters with Recorded video

Software To Be Thought: Autodesk Maya, Autodesk Motion Builder

Reference Books:

1. The Animator Toolkit for Motion Builder - **Brad Clark and Chad Moore**

SEMESTER – VI

AM 6.1 Internship programme

AM 6.2 Project Report