# डॉ. वाबासाहेद आंबेडकर मराठवाडा विद्यापीत, औरंगाबाद परिपत्रक क्रमांक/एस.यू./विज्ञान/अभ्यासक्रम/७४/२०१४

या परिपत्रकाद्वारे सर्व संबंधीतांना सुचित करण्यात येते की, विज्ञान विद्याशाखेने शिफारस केल्यानुसार बी. एस्सी. / एम. एस्सी. प्रथम व द्वित्तीय वर्षाच्या सुधारित अभ्यासक्रमास आणि बी. एस्सी. प्रथम वर्षाच्या अभ्यासक्रमांत किरकोळ बदल करण्यास विद्यापरिषदेच्या वतीने मा. कुलगुरु यांनी, त्यांना प्राप्त असलेल्या विशेष अधिकार महाराष्ट्र विद्यापीठ अधिनियम-१९९४ कलम १४(७) अन्वये मान्यता दिलेली आहे. त्या अनुषंगाने सुधारीत तयार केलेल्या अभ्यासक्रमाची प्रत या परिपत्रकासोबत आपल्या पुढील कार्यवाहीसाठी पाठविण्यात येत आहे.

| [1]  | B.Sc. Physics   | Semester-III & IV, |
|------|---|--------------------|
| [2]  | B.Sc. Chemistry                                       | Semester-III & IV, |
| [3]  | B.Sc. Botany  | Semester-III & IV, |
| [4]  | B.Sc. Zoology with minor changes                      | Semester-I & II,   |
| [5]  | B.Sc. Zoology   | Semester-III & IV, |
| [6]  | B.Sc. Fisheries                                       | Semester-III & IV, |
| [7]  | B.Sc. Electronics (Opt.)                              | Semester-III & IV, |
| [8]  | B.A./B.Sc. Mathematics                                | Semester-III & IV, |
| [9]  | B.Sc. Computer Science                                | Semester-I & II,   |
| [10] | B.Sc. Information Technology                          | Semester-I & II,   |
| [11] | B.C.A.  | Semester-I & II,   |
| [12] | B.Sc. Computer Science(Opt.)                          | Semester-I & II,   |
| [13] | B.Sc. Information Technology(Opt.)                    | Semester-I & II,   |
| [14] | B.Sc. Computer Application(Opt.)                      | Semester-I & II,   |
| [15] | B.Sc. Computer Maintenance(Opt.)                      | Semester-I & II,   |
| [16] | B.Sc. Biotechnology (Progressively)                   | Semester-I to VI,  |
| [17] | B.Sc. Biotechnology (Opt.) (Progressively)            | Semester-I to IV,  |
| [18] | B.Sc. Sericulture Technology                          | Semester-I & II,   |
| [19] | B.Sc. Networking Multimedia                           | Semester-III & IV, |
| [20] | B.Sc. Bioinformatics                                  | Semester-I & II,   |
| [21] | B.Sc. Hardware & Networking                           | Semester-I & II,   |
| [22] | B.Sc. Animation                                       | Semester-I & II,   |
| [23] | B.Sc. Dairy Science & Technology                      | Semester-III & IV, |
| [24] | B.Sc. Biochemistry                                    | Semester-III & IV, |
| [25] | B.Sc. Analytical Chemistry                            | Semester-III & IV, |
| [26] | B.Sc. Textile & Int. Decoration<br>with minor changes | Semester-I & II,   |
| [27] | B.Sc. Textile & Int. Decoration                       | Semester-III & IV, |
| [28] | B.Sc. Home Science with minor changes                 | Semester-I & II,   |
| [29] | B.Sc. Home Science                                    | Semester-III & IV, |
| [30] | B.Sc. Agro.Chem. & Fertilizers                        | Semester-III & IV, |

|      | :: [2] ::                           |                    |
|------|-------------------------------------|--------------------|
| [31] | B.Sc. Geology                       | Semester-III & IV, |
| [32] | B.A. Statistics with minor changes  | Semester-I & II,   |
| [33] | B.A. Statistics                     | Semester-III & IV, |
| [34] | B.Sc. Statistics with minor changes | Semester-I & II,   |
| [35] | B.Sc. Statistics                    | Semester-III & IV, |
| [36] | B.Sc. Industrial Chemistry          | Semester-III & IV, |
| [37] | B.Sc. Horticultural                 | Semester-I & II,   |
| [38] | B.Sc. Dry land Agriculture          | Semester-I & II,   |
| [39] | B.Sc. Microbiology                  | Semester-III & IV, |
| [40] | M.Sc. Computer Science              | Semester-I to IV,  |
| [41] | M.Sc. Information Technology        | Semester-I to IV.  |

हा सुधारीत व नवीन तयार केलेल्या अभ्यासक्रमाचा आराखडा शैक्षणिक वर्ष २०१४-१५ किरता मर्यादित असेल व विद्यापिश्वदेच्या अंतिम मान्यतेनंतर हे परिपत्रक नियमित ठेवण्याबाबत या कार्यालयाद्वारे नवीन परिपत्रक पारीत करण्यात येईल. तसेच सुधारीत व नवीन तयार केलेल्या अभ्यासक्रमाची प्रत विद्यापीठाच्या संकेतस्थळावर उपलब्ध आहे.

करिता, या परिपत्रकाची सर्व संबंधितांनी नोंद घ्यावी.

5-29 NOV., ZULJ AC after Circulars from Circular 110.55 & onwards

विद्यापीठ प्रांगण, औरंगाबाद-४३१ ००४. संदर्भ क्र.एस.यु./सा.शा./सबवि /२०१३-१४/ ६५९९-७०२ दिनांक :- २७-०५-२०१४.



भ्रातक, महाविद्यालये व विद्यापीठ विकास मंडळ.

# या परिपन्नकाची एक प्रतः-

- मा. परिक्षा नियंत्रक, परिक्षा विभाग,
- २) मा. प्राचार्य, सर्व संलग्नीत महाविद्यालये,
- संचालक, युनिक यांना विनंती करण्यात येते की, सदरील अभ्यासक्रम विद्यापीठाच्या संकेतस्थळावर उपलब्ध करुण देण्यात यावेत.
- ४) संचालक, ई-सुविधा केंद्र, विद्यापीठ परिसर,
- ५) जनसंपर्क अधिकारी, मुख्य प्रशासकीय इमारत,
- कक्ष अधिकारी, पात्रता विभाग, मुख्य प्रशासकीय इमारत,
- ७) कक्ष अधिकारी, बी.ए. / बी.एस्सी./ बी.सी.एस./एम.एस्सी. विभाग, परीक्षा भवन,
- अभिलेख विभाग, मुख्य प्रशासकीय इमारती मागे,
  डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद.

# PARAMADA UNIVERSITADA PARAMANGABAD.



# Revised Syllabus of

B.SC. IIND YEAR

NETWORKING & MULTIMEDIA

SEMESTER-III & IV

Three Year Degree Course

[ Effective for Academic Year 2014-15]

# B.Sc. Networking and Multimedia

#### Semester-I

| Course | Course Title                     | Workload No of | Max Marks | No of Hours |
|--------|----------------------------------|----------------|-----------|-------------|
| Code   |                                  | Hour /Week     |           | Exam        |
| MN301  | Computer Fundamentals            | 2              | 50        | 3           |
| MN302  | Communication Skills             | 1              | 50        | 3           |
| MN303  | Graphics                         | 3              | 50        | 3           |
| MN304  | Desktop Publishing               | 3              | 50        | 3           |
| MN305  | Digital Art Photography (Part 1) | 3              | 50        | 3           |
| MN351  | Practical Based on MN303 & MN304 | 4              | 50        | 3           |
| MN352  | Practical Based on MN305         | 4              | 50        | 3           |
|        | Total                            | 20             |           |             |

# Semester-II

| Course | Course Title                     | No of Hour | Max Marks | No of Hours |
|--------|----------------------------------|------------|-----------|-------------|
| Code   |                                  | /Week      |           | Exam        |
| MN306  | Digital Art Photography (Part 2) | 3          | 50        | 3           |
| MN307  | Web Designing and Java Script    | 3          | 50        | 3           |
| MN308  | Advertising                      | 3          | 50        | 3           |
| MN309  | HTML Basics                      | 3          | 50        | 3           |
| MN353  | Practical Based on MN306 & MN307 | 4          | 50        | 3           |
| MN354  | Practical Based on MN306 & MN307 | 4          | 50        | 3           |
|        | Total                            | 20         | 300       |             |

#### Semester-III

| Course | Course Title                     | No of Hour | Max Marks | No of Hours |
|--------|----------------------------------|------------|-----------|-------------|
| Code   |                                  | /Week      |           | Exam        |
| MN310  | Transferring Digital Photographs | 3          | 50        | 3           |
| MN311  | Web Animation in Adobe Flash     | 3          | 50        | 3           |
| MN312  | 2D Animation                     | 3          | 50        | 3           |
| MN313  | Basics of Audio                  | 3          | 50        | 3           |
| MN355  | Practical Based on MN310 & MN311 | 4          | 50        | 3           |
| MN356  | Practical Based on MN312 & MN313 | 4          | 50        | 3           |
|        | Total                            | 20         | 300       |             |

# Semester-IV

| Course | Course Title                     | No of Hour | Max Marks | No of Hours |
|--------|----------------------------------|------------|-----------|-------------|
| Code   |                                  | /Week      |           | Exam        |
| MN314  | Digital Film Making              | 3          | 50        | 3           |
| MN315  | Modeling and Texturing in Maya   | 3          | 50        | 3           |
| MN316  | Premier and Sound Forge          | 3          | 50        | 3           |
| MN317  | 3D Foundation Fundamentals       | 3          | 50        | 3           |
| MN357  | Practical Based on MN314 & MN315 | 4          | 50        | 3           |
| MN358  | Practical Based on MN316 & MN317 | 4          | 50        | 3           |
|        | Total                            | 20         | 300       |             |

# Semester-V

| Course | Course Title                     | No of Hour | Max Marks | No of Hours |
|--------|----------------------------------|------------|-----------|-------------|
| Code   |                                  | /Week      |           | Exam        |
| MN318  | Flash Web Site Design            | 3          | 50        | 3           |
| MN319  | 3D Modeling and Animation I      | 3          | 50        | 3           |
| MN320  | 3D Modeling and Animation II     | 3          | 50        | 3           |
| MN321  | Elective-I (Any One)             | 3          | 50        | 3           |
| MN359  | Practical Based on MN318 & MN319 | 4          | 50        | 3           |
| MN360  | Practical Based on MN320 & MN321 | 4          | 50        | 3           |
|        | Total                            | 20         | 300       |             |

# Semester-VI

| Course | Course Title                    | No of Credits | No. of Hour | No of Hours |
|--------|---------------------------------|---------------|-------------|-------------|
| Code   |                                 |               | Exam        | Exam        |
| MN322  | Video Introduction and Advanced | 3             | 50          | 3           |
| MN323  | Digital Film Editing            | 3             | 50          | 3           |
| MN324  | Sound Editing Engineering       | 3             | 50          | 3           |
| MN325  | Elective-II(Any One)            | 3             | 50          | 3           |
| MN361  | Major Project                   | 4             | 50          | 3           |
| MN362  | Seminar                         | 4             | 50          | 3           |
|        | Total                           | 20            | 300         |             |

# **Elective-I (Select any One)**

| Course Code | Course Title                    |
|-------------|---------------------------------|
| MN321       | Working with Audio              |
| MN321       | Web Designing in Dreamweaver    |
| MN321       | 3D Texturing and Lighting       |
| MN321       | 3D Rigging and Animation        |
| MN321       | 3D Dynamics and Particles       |
| MN321       | Digital Sculpting and Texturing |

# **Elective-II (Select any One)**

| Course Code | Course Title                    |
|-------------|---------------------------------|
| MN325       | 3D Rendering                    |
| MN325       | Character Modeling              |
| MN325       | Visual Effects                  |
| MN325       | Compositing                     |
| MN325       | VFX Shoot                       |
| MN325       | Animation Production Pipelining |

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# MN310 Transferring Digital Photographs

#### Unit-1

Insert a Memory Card into Your PC

Eject a Memory Card from Your PC

Transferring Digital Photos from Your Memory Card to Your Computer with a Card Reader

Make the Best Barbecue Ribs Ever

Clean Concrete

#### Unit-2

Transferring Digital Photos from Your Memory Card to Your Computer with a Card Reader

Transferring Digital Images from Your Camera to Your Windows Computer

Transfer Photos from Your Digital Camera to Computer

Download Images from Your Digital Camera to Your PC

#### Unit-3

Use the Scanner and Camera Wizard in Windows XP

Edit a Picture in Paint Using Windows XP

For Seniors: E-Mail a Windows Photo

For Seniors: View an Image in Windows Photo Viewer

For Seniors: Tag Your Windows' Photos

#### Unit-4

Download Images to a Mac with a Card Reader

Transferring Photos from Your Digital Camera to Your Computer by Cable

Transferring Digital Images from Your Camera to Your Windows Computer

Add Keywords to Your Landscape Photos

Import Digital Images from Your Camera into Mac OS X Snow Leopard

#### Unit-5

Transferring digital photos from one computer to another

Connect to a network. Use a network cable to transfer directly to a new folder in the new computer. Drag and drop folders.

Use CD-Rs (from your previous backups) or CD-RWs so you can reuse them later.

Use a flash disk if you have one. It functions like a small hard disk.

zip drives

Fast internet connection for upload your photos in the internet and download in the other computer.

#### **Reference Books:**

- 1. Digital Image Transfer: Creating Art with Your Photography [Paperback], Ellen G. Horovitz, ISBN-13:9781600595356, ISBN-10:1600595359, Publication Date: 10/4/2011, Publisher: Sterling Publishers- Pixiq
- 2. Digital Image Transfer: Creating Art with Your Photography
- 3. www.tandfonline.com/doi/abs/10.1080/17533015.2012.663767.
- 4. Adobe Flash CS3 Professional By Robert Reinhardt, Snow Dowd (Bible)
- 5. Creating website by Matthew MacDonald, O'Reilly Publishing.
- 6. PHP, MySQL & JavaScript by Robin Nixon, O'Reilly Publishing.
- 7. Murach's JavaScript and DOM Scripting, Murach Publishing.
- 8. HTML for Beginners by FiruzaAibara, Shroff Publishing.
- 9. WordPress 3 Site Blueprints by Heather R.Wallance, Shroff Publishing.
- 10. OpenStreetMap by Jonathan Bennett, Shroff Publishing.
- 11. Google Advertising Tools by Harold Davis, O'Reilly Publishing.

#### MN311 Web Animation in Adobe Flash

#### **UNIT-1**

What is mean by WebAnimation?

Why we need Web Animation?, History of Animation-Uses of Animation -Types of Animation -Principles of Animation -Some Techniques of Animation -History of web-Evolution of World Wide Web-Web colors-Images and links-Essential elements of a Web page-Animation on the web

**Adobe Flash** - Symbols, Instances, and the Library- Understanding the Document Library-Defining Content Types- Editing Symbols- Modifying Instance Properties- Slice Scaling for MovieClip Backgrounds- Color Basics- Working in the Swatches Panel- Using the Color Panel-Working with Droppers, Paint Bucket, and Ink Bottles

#### **UNIT-2**

Working with Text and Graphics - Text Field Types in Flash- The Text Tool and the Property Inspector- Font Export and Display- Sampling and Switching Fills and Strokes

- Transforming Gradients and Bitmap Fills- Gradient Transform Used for Lighting Effects
- Applying Modify Shape Menu Commands- Free Transform Commands and Options-Modifying Item Types-Using the History Panel

Animation Strategies - Establishing Ground Rules- Defining Variables- Adding Personality

- Manipulating Perceptions and Illusion- Understanding the Laws of Nature

#### **UNIT-4**

Timeline Animation - Basic methods of Flash Animation- Frame-by-Frame Animation

- Modifying Multiframe Sequence- Using Tweens for Animation- Integrating Multiple Animation Sequence- Organizing Symbol Instances on the Main Timeline- Reusing and Modifying Symbol Instances- Duplicating Tweened Animation Properties with the Copy Motion Command

Applying Filters, Effects and Layer Types - Applying Filters in Flash- Controlling Color

- Layering Graphics with Blend Mode- Using Timeline Effects for Graphics and Animation
- Motion Guides- Mask Layers- Motion Guides and Movie Clip Masks- Using Distribute to Layers

#### **UNIT-5**

Character Animation Techniques - Working with Large File Sizes- Some Cartoon Animation Basics- Animator's Keys and Inbetweening- Coloring the Art- Flash Tweening- Lip-Syncing

- Backgrounds and Scenery- Finishing Up

Adding Sound - Identifying Sound File Import and Export Formats- Importing Sounds into Flash- Assigning a Sound to a Button- Adding Sound to the Timeline- Organizing Sounds on the Timeline- Synchronizing Audio to Animations

Embedding Video-Importing video Files-Modifying and Controlling Videos

**Testing and Publishing a Flash Movie**-Selecting Your Publishing Settings-Previewing and Publishing Files-Evaluating Download Performance-Optimization Factors-Exporting and Publishing Movies-Html designing with Flash methods of embedding Flash site in an html page for optimal viewing-Publish your site-Flash usability debate.

#### Reference Book:-

- 1. HTML5 Canvas, Steve Fulton and Jeff Fulton, O'Reilly Publishing.
- 2. Adobe Flash CS5: The Missing Manual by Chris Grover, O'Reilly Publishing
- 3. Digital Classroom by Fred Gerantabee, Wiley Publishing, ISBN: 978-0-470-60776-3.
- 4. Adobe Flash CS5 Professional Digital Classroom Fred Gerantabee Wiley Publisher, ISBN: 0-470-60776-9.
- 5. HTML, XHTML & CSS (Visual QuickStart Guide Series) Sixth Edition by Elizabeth Castro, ISBN-10: 0321430840.
- 6. Adobe Flash CS3 Professional By Robert Reinhardt, Snow Dowd (Bible)
- 7. Creating website by Matthew MacDonald, O'Reilly Publishing.
- 8. PHP, MySQL & JavaScript by Robin Nixon, O'Reilly Publishing.
- 9. Murach's JavaScript and DOM Scripting, Murach Publishing.
- 10..HTML for Beginners by FiruzaAibara, Shroff Publishing.
- 11. WordPress 3 Site Blueprints by Heather R. Wallance, Shroff Publishing.
- 12. OpenStreetMap by Jonathan Bennett, Shroff Publishing.
- 13. Google Advertising Tools by Harold Davis, O'Reilly Publishing.

#### MN312 2D Animation

#### **UNIT-1**

#### **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-2**

# **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 – Objectstroke 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 – Motionpaths – Applying geometric transformations over time – Intertwining options – Looping and palindromemotion – Features specific to the program in use.

#### **UNIT-3**

#### **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

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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 – 3/4thView – Three Dimensional Sphere and Angle of Drawing – Head at Various Angles – Male, Female, andChildren 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 withthe 45 Degree Placement Rule – Pose and Placements – Musculature Structure – Various ShoulderPositions – Upper Arm, Forearm and the Hand– Refining Poses – Legs and Calves

#### **UNIT-4**

# **2D** Character Animation (Practical)

**Beginner level** – Introductory concepts to basic techniques in Animation, Principles of AnimationProduction. The Class is geared towards the beginner to intermediate student, and is centered on 2Dcharacter animation.

**Intermediate level** – Introductory concepts to basic techniques in Animation, Principles of AnimationProduction. The Class is geared towards the beginner to intermediate student, and is centered on 2Dcharacter animation.

#### Unit-5

Layout & Background Painting – Basic and Advanced techniques layout & Basic and Advancedtechniques 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 –Introductory concepts to basic techniques in Animation, Principles of animation Production of cleanupand 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.

#### Reference Books:-

- 1. GSBaluja, DhanpatRai& CO, Computer Graphics & Multimedia, First Edition, DhanpatRai& CO (P) Ltd. 2003.
- 2. VikasGubta&Kogent Solutions Inc. : Multimedia and Web Design.A Revolutionary 3-Stage Sub learning System Published by dream tech.
- 3. Hedley Griffin, The Animator's Guide to 2D Computer Animation, Focal Press, December 2000
- 4. Mark Simon, Producing Independent 2D Character Animation, Focal Press, Feb 2003
- 5. Jayne Pilling, Animation 2D and Beyond, Rotovision, September 2000
- 6. Scratch 1.4 (Beginner's Guide) by Michael Badger, Shroff Publishing.
- 7. Alice 3 Cookbook by Vanesa S.Olsen, Shroff Publishing.
- 8. Fundamentals of Computer Graphics by Peter Shirley, Steve Marschner, AK PETERS Publishing. **Practical**: At least two practical on each unit.

#### MN313Basics of Audio III SEM

#### **UNIT-1**

**Basic sound concepts:** Computer representation of sound- Audio formats- MIDI, WAV Music: MIDI concepts- MIDI Devices- MIDI Messages- MIDI SMPTE timing standard- MIDI Software: Speech, Speech Generation- Speech Analysis- Speech TransmissionAudio Compression: ADPCM in speech coding- MPEG audio- 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.

#### **UNIT-2**

**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-3**

**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 fileformats.

#### **UNIT-4**

**Special effects:** Adding effect automation enveloping- adding a volume envelop-adding a panningenvelop- 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.

#### **UNIT-5**

**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.

#### Reference Books:-

- 1. Multimedia Systems by John F. Koegel Buford, Addison Wesley.
- 2. Multimedia In Practical Technology and Application by Judith Jeffcoate, PHI.
- 3. Multimedia Programming by Simon J.Gibbs and DionysionC Tsichrikzis, Addison Wesley.
- 4. Multimedia Systems by John F. Koegel Buford, Addison Wesley.
- 5. Multimedia: Computing, Communications and Applications (Steinmetz Ralf and NahrstedtKlara,) Pearson Education
- 6. Multimedia System design (Prabhat K. Andheigh,) KiranThakrar
- 7. Multimedia Systems (Koegel Buford) Pearson Education
- 8. Creating website by Matthew MacDonald, O'Reilly Publishing.
- 9. PHP, MySQL & JavaScript by Robin Nixon, O'Reilly Publishing.
- 10.Murach's JavaScript and DOM Scripting, Murach Publishing.
- 11. HTML for Beginners by FiruzaAibara, Shroff Publishing.
- 12. WordPress 3 Site Blueprints by Heather R. Wallance, Shroff Publishing.
- 13. OpenStreetMap by Jonathan Bennett, Shroff Publishing.

## MN314 Digital Film Making IV SEM

#### Unit-1

# **Style: Cinematography**

Video Recording Media-The Video Camera-Lenses-Depth of Field-Grip Equipment - Tripods-Field Monitors-Shooting Techniques-Composition and Framing-The Clapper Board-Tips for Camera Hire-Standard Shot Sizes-Lighting-Lighting Equipment-Safety with Lighting Understanding Light

Unit-2

Style: Sound-Location Recording-Microphones-Recording Sound

Unit-3

# **Post -Product ion Style : Editing**

Non-linear Editing-Final Cut Pro Tips-Final Cut Pro Short Cuts-Adobe Photoshop Exercise -Adobe Illustrator Exercise-Visual Effects (VFX)

#### **Sound Post Production**

Sound Design-Sound Editing-Sound Mixing

Unit-5

#### **Digital Media**

Editing Your Show and Adding Music-Basic Editing in iMovie 4 -Uploading DV Footage and Organizing Clips-Trimming a Clip-Trim as You Upload-Trim Before You Insert-Organizing Your Clips-Assembling Your Movie by Inserting Clips into the Clip Viewer-Playing Back Your Movie-Switching to the Timeline Viewer-Timeline Viewer Controls-Making Edits in the Timeline Viewer-Cropping a Clip in the Timeline Viewer-Adding Transitions-Extracting an Audio Clip-Controlling the Audio Level of a Clip-Overlapping Audio Clips-Creating a Split Edit -Importing Music from the iTunes Library-The Internet-Video For the Web-Compressing Video -Capturing Video-Shooting and Editing for the Web-2D Imaging for Video

#### **Reference Books:-**

- 1.Mise-En-Scene: Film Style and Interpretation by **John Gibbs**.
- 2. Narration in Light: Studies in Cinematic Point of View by George M. Wilson
- 3.Digital filmmaking for TEENS by Pete Shaner And Gerald Everett Jones
- 4. The Digital Filmmaking Handbook, Fourth Edition by Sonja Schenk; Ben Long

#### MN315 Modeling and Texturing in Maya IV SEM

#### UNIT -1

Maya Basic Modeling – Maya Interface – Creating objects using EP curve, CV curve – Making Table Lamp – Polygon Terminology, Polygon over view – Modeling a dice using Boolean – Making An Box using loft – Modeling some inorganic objects – Creating Terrain using sculpt geometry tool.

#### UNIT -2

B.G & Set Modeling – Creating Mountains – Interior & Exterior Modeling – Modeling a garden – Modeling a Landscape.

#### UNIT -3

Maya Character Modeling – Modeling the eyes, nose – Modeling the Leg of the Character – Modeling the body – Modeling a Female Character – Modeling a Male Character – Modeling a High Polygonal.

#### **UNIT - 4**

Material assigning – Hyper Shade over view – Shades and Textures – Material Linking – Light Linking to the materials – Mental Ray Shades – Mental Ray Textures – Image based Lighting Shades – Controlling Photon Emission from Shades.

#### **UNIT - 5**

Character UV Texturing – UV Texturing over View – Applying Texture for Dice – Applying UV's for Inorganic Models – Applying UV's for head – Applying UV's for body – Applying UV's for B.G.

#### **Reference Books:-**

- 1. Modeling a Character in 3Ds Max7, Published by dreamtech, Second Edition - 2005, by Paul Steed .
- 2. Mastering Maya 7, Wiley by George by John Kundert Gibbs, Eric etc.

# MN316Premier and Sound ForgeIV SEM

#### **UNIT-1**

#### Introduction

MIDI and Digital Audio- Setting up Sound Forge- File Formats Supported by Sound Forge - Exploring the Sound Forge User Interface- Getting Help in Sound Forge

#### **UNIT-2**

## Getting around in Sound Forge 9.0

Opening an Existing Audio File- Working with Data Windows- Overview of Transport Control -Working with Markers- Working with Regions- Converting Markers into Regions- Closing an Audio File- Quitting Sound Forge

#### **UNIT-3**

# **Recording and Playback**

Automatic Retake Recording- Multiple Takes Recording- Punch-In Recording- Automatic Recording- Rendering a Project File- Playing an Audio File- Working with Playlist

#### **UNIT-4**

# **Basic Editing in Sound Forge**

Overview of Editing Tools- Cutting and Copying Data- Pasting of Data- Pasting Data Using Paste Special- Deleing Data- Trimming/Cropping Data- Undoing and Redoing Changes- Editing the Cutlists

#### **UNIT-5**

# **Applying the Processing Functions**

Working with Presets- Auto Trimming and Audio Data- Changing the bit depth of the Audio File- Changing Channels of the Audio Data- Setting the DC Offset- Adjusting Audio Volume-Inserting Silence into the Audio File- Inverting the Audio Data- Muting the Volume of the Audio Data- Normalizing the Audio Volume-Planning/Expanding the Audio- Changing the Sample Rate of the Audio File- Reversing the Audio Data- Smoothing/Enhancing the Audio Data- Changing the length of the Audio Data- Changing Volume

#### **UNIT-6**

#### **Audio Effects in Sound Forge**

Echo Effects- Pitch Effects- Volume Effects- Reverberation Effects- Wave Hammer Effect **UNIT-7** 

#### Synthesis, Sampling, and Batch Processing

Synthesizing Audio-Sampling-Batch Processing

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#### Reference Book:-

- 1. Sound Forge 9.0 in Simple Steps (dreamtech Press).
- 2.Sound Forge® 8 Power, The Official Guide by Scott R. Garrigus.
- 3. Multimedia Programming by Simon J.Gibbs and DionysionC Tsichrikzis, Addison Wesley.
- 4. Multimedia Systems by John F. Koegel Buford, Addison Wesley.
- 5. Multimedia: Computing, Communications and Applications (Steinmetz Ralf and NahrstedtKlara,) Pearson Education.
- 6. Adobe Flash CS3 Professional By Robert Reinhardt, Snow Dowd (Bible)
- 7. Creating website by Matthew MacDonald, O'Reilly Publishing.
- 8. PHP, MySQL & JavaScript by Robin Nixon, O'Reilly Publishing.
- 9. Murach's JavaScript and DOM Scripting, Murach Publishing.
- 10. HTML for Beginners by FiruzaAibara, Shroff Publishing.

#### MN317 3D Foundation Fundamentals IVSEM

#### UNIT-1

#### 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-2**

#### **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-3**

# 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-4**

#### **Basic of Dynamics**

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

#### Unit-5

#### Rendering

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

#### **Reference Books:-**

- 1. 3D in Photoshop CS4 by Dan Moughamian and Scott Valentine.
- 2. Adobe Photoshop CS6 Classroom in a Book by Adobe Creative Team
- 3. OpenSceneGraph 3.0 by Rui Wang, XueleiQian, Shroff Publishing.
- 4. Joomla 1.5 Multimedia by Allan Walker, Shroff Publishing.
- 5. Scribus 1.3.5 by Cedric Gemy, Shroff Publishing.
- 6. Unity 3D Game Development by example by Ryan Henson Creighton, Shroff Publishing.
- 7. Adobe Flash CS3 Professional By Robert Reinhardt, Snow Dowd (Bible)
- 8. Creating website by Matthew MacDonald, O'Reilly Publishing.
- 9. PHP, MySQL & JavaScript by Robin Nixon, O'Reilly Publishing.
- 10. Murach's JavaScript and DOM Scripting, Murach Publishing.
- 11. HTML for Beginners by FiruzaAibara, Shroff Publishing.
- 12. WordPress 3 Site Blueprints by Heather R. Wallance, Shroff Publishing.
- 13. OpenStreetMap by Jonathan Bennett, Shroff Publishing.