B.A AUDIOGRAPHY & DIGITAL EDITING

(Detailed semesterised syllabus for programme in
BA Audiography & Digital Editing under the
Choice Based Credit System (CBCSS Model III))

Mahatma Gandhi University, Kottayam

2017

Prepared by

Board of Studies / Expert Committee (UG) in Multimedia

Mahatma Gandhi University, Kottayam

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Acknowledgement

The B.A programme in *Audiography and digital editing* is branded for its creative approach and distinctive topics discussed. This curriculum is inspired by the stupendous world of art and new creative techniques. The syllabus tries to transmit most essential and updated information to students. The programme gives an opportunity for the students to develop the basic skills in Audio recording, designing, Digital editing and Multimedia.

The Board of Studies puts on record our sincere thanks to the honorable Vice Chancellor and Pro Vice Chancellor of Mahatma Gandhi University, for their guidance and help, extended to us during the restructuring of the *B.A Audiography and digital editing syllabus*.

The Board of Studies would like to extend our sincere gratitude to the University Syndicate members for their understanding and support.

We thank the Registrar of the University, both Academic and Finance sections of the University and the members of BOS Core-Committee for offering their service for the flawless completion of the syllabus.

The successful completion of this syllabus is the end product of hard works done by academicians from various colleges and eminent personalities from the media industry. We would like to thank them for their valuable service during the restructuring process.

For the Expert Committee in Multimedia,

Leenus LK
(Convenor)

Kottayam
MAY 2017

1. INTRODUCTION

Developing the academic scheme for training in Audiography& Digital Editing would invite the need to integrate the various topics that are the important ingredients for such a course. Expounding the various theoretical concepts would naturally broaden the level of comprehension during the practical sessions. This gives an opportunity for balanced in-put and in-depth study of the various subjects. Thus, the student gains an opportunity to formulate independent conclusions that will eventually get reflected in his year ending projects. The expected result is not based on spoon-feeding, but one's own creative and intellectual applications.

By dissecting Audiography& Digital Editing on a single platform, the student gains the insight into the inter-dependability of the various media. The trust of this course is on subject like Audiography, and Digital Video Editing. The candidates become eligible for a Degree after six-semesters of study, spanning over a period of 3 years and the successful completion of the Examinations.

2. TITLE

B.A AUDIOGRAPHY AND DIGITAL EDITING - Graduate Programmes under Choice Based Credit System, **2017**" (UGCBCSS 2017).

3. SCOPE

3.1 Applicable to all regular Under Graduate Programmes conducted by the University with effect from 2017 admissions, except for Professional and B.Voc programmes. Also, applicable to Distance/Private Undergraduate Programmes with suitable modifications. Under Graduate Programmes in Management Studies are included as non-professional programmes. Provided that the existing CBCSS Regulations 2013 shall be applicable to students who were admitted prior to the commencement of these Regulations and who are continuing their studies.

3.2 Examinations of the courses being run under the Distance/Private registration scheme shall be conducted annually.

3.3 The provisions herein supersede all the existing regulations for the Regular/Distance/Private Undergraduate programmes to the extent herein prescribed.

4. AIMS AND OBJECTIVES OF THE PROGRAMME

A basic programme in Audiography& Digital Editing is the initial step towards a formal and graded approach for a profession in Audiography and digital Editing. A plus two student, who is a stranger to the above professions, should at the Degree level undertake a voyage of discovery, so that he/she would be able to assess his/her highest talent after mooring himself/herself at the level of the Degree Course. The following Syllabus for BA Audiography & Digital Editing makes a genuine effort to invest the students with the multifaceted aspects of Audiography and Digital Editing.

5. B.A PROGRAMME IN AUDIOGRAPHY AND DIGITAL EDITING

5.1. PROGRAMME STRUCTURE FOR MODEL III - B.A/ B.Sc /B.COM

a.	Programme Duration	6 Semesters
b.	Total Credits required for successful completion of the Programme	120
c.	Credits required from Common Course I	8
d.	Credits required from Core + Complementary + Vocational Courses including Project	109
e.	Open Course (Credits)	3
f.	Minimum attendance required	75%

6. DURATION OF COURSE

- The duration of U.G. Programmes shall be **6 semesters**.
- A student may be permitted to complete the programme, on valid reasons, within a period of 12 continuous semesters from the date of commencement of the first semester of the programme.
- Attendance: Students having a minimum of 75% average attendance for all the courses only, can register for the examination.

7. MARKS DISTRIBUTION FOR EXTERNAL EXAMINATION AND INTERNAL EVALUATION

The external theory examination of all semesters shall be conducted by the University at the end of each semester. Internal evaluation is to be done by continuous assessment. For all papers (theory and practical) total percentage of marks of external examination is 80 and total percentage of marks of internal evaluation is 20 (ie. In the ratio of 80:20).

Marks distribution for external and internal assessments and the components for internal evaluation with their marks are shown below:

7.1 FOR ALL PRACTICAL PAPERS:

(a) Marks of external Examination : 40

(b) Marks of internal evaluation : 10

Components of Practical-internal evaluation	**Marks**
Attendance	**3**
Record*	**5**
Test Papers	**2**
Total	**10**

*Marks awarded for Record should be related to number of experiments recorded.

All the three components of the internal assessment are mandatory.

8.3 **FOR PROJECTS, INDUSTRIAL VISIT AND COMPREHENSIVE VIVAVOCE*:**

(a) Marks of external Examination : 80

(b) Marks of internal evaluation : 20

Components of Project I.V. and Viva – Evaluation External	**Marks**
Dissertation and I.V. report (External)	50
Comprehensive Viva-voce Viva-Voce (External)	30
Total	**80**

* Bonafide reports of the project work and Industrial Visit (I.V) conducted shall be submitted at the time of examination.

All the four components of the internal assessment are mandatory.

Components of Project & I.V. - Internal Evaluation	**Marks**
Punctuality	5
Experimentation / Data Collection	5
Knowledge	5
Report	5
Total	**20**

8.4 **OJT EVALUATION**

For On the Job Training (OJT) there is only internal evaluation.

8.5**. ASSIGNMENTS**

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

8.6 **SEMINAR / VIVA**

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

Consolidated Scheme for B.A Audiography and Digital editing

Sem.	Course Code	Course Title	Course Type	Course Category	Credit	Hours Per Week
I		1-1 Model III English I	Theory	Common	4	5
	MM1CRT01	1-2 Art and Visual Perception I *	Theory	Core.	4	5
	AE1CRT01	1-3 Science of Sound	Theory	Core	4	5
	MM1CRT03	1-4 Still Photography ***	Practical	Complim.	4	5
	AE1CMP02	1-5 Introduction to Music	Practical	Complim.	4	5
					20	**25**
II		2-1 Model III English II	Theory	Common	4	5
	MM2CRT05	2-2 Art and Visual Perception II *	Theory	Core	4	5
	AE2CRT03	2-3 Audio Electronics	Theory	Core	4	5
	AE2CMT04	2-4 Introduction to Film & Video Technology	Theory	Complim.	4	5
	AE2CMP05	2-5 Scriptwriting & Storyboarding	Practical	Complim.	4	5
					20	**25**
III	AE3CRP06	3-1 Digital Audio workstation	Practical	Core	4	5
	AE3CRT07	3-2 Editing Principles	Theory	Core	4	5
	AE3CMP08	3-3 Shooting Methods	Practical	Complim.	4	5
	AE3CRT09	3-4 Digital Audio Fundamentals	Theory	Core	4	5
	AE3CRP10	3-5 Editing Studio I	Practical	Core	4	5
					20	**25**
IV	AE4CMP11	4-1 Visual Effects Studio I	Practical	Complim.	4	5
	AE4CRP12	4-2 Sound: Production & Reproduction I	Practical	Core	4	5
	AE4CRP13	4-3 Editing Studio II	Practical	Core	4	5
	MM4CRT12	4-4 Media Management*	Theory	Complim.	4	5
	AE4CRP14	4-5 Live Sound Reinforcement	Practical	Core	4	5
					20	**25**
V	AG5CRT14	5-1 Environmental Studies and Human Rights	Theory	Core	4	5
	AE5CRP15	5-2 Multi camera shooting, Recording & Editing	Practical	Core	4	5
	AE5CRP16	5-3 Sound: Production & Reproduction II	Practical	Core	4	6
	AE5CRP17	5-4 Digital Cinema Editing	Practical	Core	4	5
		5-5 Open Course		Open	3	4
	AE5OPP1.1	A. Musical Instrument Digital Interface	Practical			
	AE5OPP1.2	B. Visual Effects Studio II	Practical			
	AE5OPP1.3	C. Introduction to Graphic Design	Practical			
					19	**25**
VI	AE6OJP01	6-1 Internship	OJT		2	
	AE6PRP01	6-2 Film Appreciation	Project	Core	4	5
	AE6PRP02	6-3 Multi camera Video Production	Project	Core	4	5
	AE6PRP03	6-4 Multichannel Audio Recording and Mixing	Project	Core	4	5
		6-5 Choice Based Course		Core	4	5
	AE6CBP1.1	A. Location Sound Recording	Project			
	AE6CBP1.2	B. 3D Editing	Project			
	AE6CBP1.3	C. Radio Program Production	Project			
	AE6CMP04	6-6 Demo Reel Presentation	Project	Complim.	3	3
					21	**25**
					120	

- Subjects denoted with *are common for Multimedia, Visual Communication and Audiography and Digital Editing
- Subjects denoted with ***are common for Multimedia and Audiography & Digital Editing.

SEMESTER I

COURSE 1-2ART AND VISUAL PERCEPTION I(THEORY)

OBJECTIVE

To strengthen the artistic background of the student to a cognizable level and to give insights to the research methodology.

Module I The nature and purpose of narrative art - Enjoyment of re-creation – Memory and imagination - Origin of Story - Verbal narration.

Module II Pre-historic attempts at re-creation - Attempts of the cave man – Pictorial origins of written language.

Module III Attempt at codification – Sagas & Epics – Mesopotamian, Indian, Roman and Greek epics

Module IV Art and Ancient civilization – Mesopotamian, Egyptian, Indian, Greek and Roman

Module V Art and Ancient civilization –Egyptian, Greek and Roman

REFERENCE

1. Million And One Nights : Terry Ramsaye
2. NatyaSastra (Bharath Muni) : Man Mohan Ghosh
3. Necessity of Art : Ernest Fisher
4. Social history of Art : Arnold Hauser
5. Art and Visual Perception : Rudolf Arnheim
6. Encyclopedia of World Art (Vol. 1 & II) : McGraw Hill Publication
7. The Art of Pictorial Composition : Wolehonok

COURSE 1-3: SCIENCE OF SOUND (Theory)

OBJECTIVES: To understand the nature and characteristic of sound wave, human hearing mechanism and various acoustics methods and treatments.

MODULE 1 What is Sound? Nature and characteristics of a Sound Wave, Amplitude, Frequency, Velocity, Wave length,Phase, Harmonic content-Intervals, Octaves,Partials, and Harmonics. Overtone and Timbre.Wave motion-Transverse and longitudinal waves.How sound travels in air - Sound Transmission and Medium Density.

MODULE II Basic acoustics – sound pressure and sound power,inverse square law, decibel.reflection,refraction,difraction,diffusion, absorption,standing waves,roommodes-Axial,Tangential,Oblique modes..Echo reverberation, Reverberation time,.sabine formula.Ressonanceeffect.Free and Reverberant Field.

MODULEIII Anatomy of Hearing and Auditory perceptionThe ear – threshold of hearing – Dynamic Range. Loudness, Pitch, Critical Bands, Equal Loudness Curve, Fletcher – Munson Curve,Doppler Effect,

MODULEIV Psycho Acoustics-Spectral Analysis- perception of frequency and loudness,beats, combination tones, Masking, , Perception of space . Soundlocalization -Perception of Direction - Hass Effect,direct sound, early reflections,Comb Filter effect

MODULE V Basics of Acoustic treatment.- Reverberation time – Measurement of reverberation time, Necessity of Reverberation, Typical Reverberation periods of a speech studio, music studio, Drama studios, Television studios, control and monitoring rooms, listening rooms, concert halls and theatres, multipurpose spaces. Absorption coefficients of Materials. Sabine Equation, Growth and Decay of sound in an Enclosure. Acoustical features and design of Auditoriums.

REFERENCE

Sound Check : The Basics of Sound and Sound Systems : Tony Moscal
Acoustics and psycho-acoustics Howard Davis M, James Angus

COURSE 1-4: STILL PHOTOGRAPHY (Practical)

MODULE 1 The camera – Different types of cameras, Rangefinder, TLR SLR, Different still film formats, Structure of a digital SLR-CCD/Cameras compression, file formats, memory card etc.

MODULE 1I Basics of SLR photography – Aperture, Shutter speed, ISO, exposure, Different types of lenses, Shooting in available light, Composition.

MODULEIII Depth of field – controlling DOF using aperture, Creative possibilities, Focusing Modes, Priority Modes.

MODULE1V Capturing motion – Panning, Slow shutter effects, Introduction to Flash Photography.

MODULE V Post processing, RAW conversion, Image editing basics.

Practical Exam – Preparing a Photo Story presentation of 30 still pictures.

REFERENCE

1. Basic Photography : M.J.Langford
2. Advanced Photography : M.J.Langford
3. Art of seeing : Alex Thomas
4. Creative Shutter Speed – Master the Art of Motion Capture : Beaumont Neewhall
5. Chasing the Light : IbarionexPerello
6. Compositions – From Snapshots to Great Shot : Laurie Excell
7. How Digital Photography Works : Ron White
8. Real World Cameras Raw : Jeff Schewe and Bruce Fraser
9. Adobe Photoshop Light room 3 on Demand : Ted LoCascio
10. Capture – Digital Photography Essentials : Glenn Rand

COURSE 1-5: INTRODUCTION TO MUSIC (Practical)

LISTENING SESSION

MODULEI Basic concepts in music – pitch, melody, harmony, rhym. Types of musical instruments– string, wind, percussion and electronic instruments.

MODULEII Introduction to Western classical music – orchestra, instrumentation. Form – song, concerto, symphony, sonata, opera, dance, music. Prominent composers – Bach, Vivaldi, Mozart, Beethovan, Rossini, Chopin, Brahms, Tchaikovsky etc.

MODULE III Introduction to Carnatic Music – Sruti, Swara, Raga, Tala, Varnam, Kriti, Katcheri – Structure, Content and Instrumentation. Prominent composer –PurandaraDasa, MuthuswamiDikshitar, SyamaSastri, SwathiThirunal etc. Introduction to Hindustani Music – Alap, Bandish.Types of compositions –dhrupad, khyal and tarana instrumentation.

MODULE 1V 20th and 21st century music – Jazz, country music, rock and roll, blues and heavy metal – Indian Film Music – Hindi, Malayalam, Tamil.

MODULE V Background Music – Incidental music, Ambient music, Music Design, Musical Functions, Instrument Types, Digital Samplers, Sound Editing sequencing/programming.

Practical Exam – A 20 page typed dissertation on any of the topic as decided by the faculty.

SEMESTER II

COURSE 2-2 ART AND VISUAL PERCEPTION II (THEORY)

OBJECTIVE

To provide the student with an opportunity of basic understanding of the growth of Art through ages.

MODULE I Classical Theatre forms - Greek and Sanskrit. Aristotelian concept of art - Imitation of Reality – Empathy . Indian concept on stage craft – Natyasastra.

MODULE II Introduction to Western Christian art – Byzantine, Gothic, Renaissance, Baroque, Rococo & Neoclassicism.

MODULE III Introduction to Western Art during 19th & 20th centuries - Romanticism, Impressionism ,Expressionism , Futurism , Dadaism, Surrealism, De Stijl, Pop Art, Op Art.

MODULE IV Introduction to Indian Art – Budhist Art in India : Madhura, Gandhara and Budhhist architecture, Rock cut temples and structural temples in Indian.

MODULE V Introduction to Islamic art and Christian art in India, Kerala Mural Paintings

REFERENCE :

1. Poetics : Aristotle (Translated Version)
2. A Concise History of art : G.Buzin
3. The art of interior design : V.K. Ball
4. Film as Art : Rudolf Armheim
5. The Meaning of Art : Herbert Read
6. The Art of Composition : Michael Jacobs
7. The Art of Colour and Design : Mitland Graves

COURSE 2-3: AUDIO ELECTRONICS
(Theory)

OBJECTIVE: This course is designed for practical understanding basic technology used in production and reproduction of sound.

MODULEI Basic concept of electronics -Concept of voltage, current, resistance and ohms law, Sources DC and AC supply, Electronic components-passive and active electronic components-resistors-colour coding- resistors-capacitors-Audio transformers. Electronic components-PN junction diode-DC power supply using system using diodes-Transistor basic concept and biasing methods- special diodes-LED, Zener diode, varactor diode, FET and MOSFET, Concept of op-amp-characteristic sof op amp and application circuits

MODULEII Transmission techniques - Cable and its characteristics-impedance-frequency response-twisted pair cable-snake cable-shielded cable-stereo cable co-axial cables and RG standards-concept of OFC and its applications. XLR male cable XLRFemale cable, XLR Board connector, TRS male cable, RCA male, RCA female, RCA board. cables- CO-axial Cable, DIN cable, USB cabel.Electronic instruments in audio circuit , amplifier design, pre amplifiers, power amplifiers and mixers, attenuators, Filters and equalizers, delay, console and computers, VU meters, LED VU meters and devices,Public address system

MODULE III Microphones- what is microphone? Microphone design – Dynamic, ribbon, condenser etc. characteristics and applications of various microphones– directional response, frequency response, Impedance, output characteristics, Stereo Making Techniques, polar pattern

MODULE IV Loud speaker-characteristics of loudspeakers .Moving coil loud speaker. Speaker, Electrodynamic loud speaker. Horn type and Cone Type Loudspeaker Baffles and Enclosures, Multy way speaker system, Headsets-in ear and on ear types Crossover network Impedance matching .requirements-Impedance, sensitivity, Distortion, Frequency response, power handling, Directivity.

MODULE V Recording of sound-Analog recording-early recording machines- Magnetic tape-magnetic tape recording process-Digital tape recording-Mass storage base system-magnetic hard disk, optical disk, memory card etc.

REFERENCE

The Microphone Book	:	John Eargle
The recording engineers hand book	:	Bobby Owsinski
Audio electronics reference book	:	Sinclair, Ian R
Sound Recording	:	Tombs David

COURSE 2-4: INTRODUCTION TO FILM AND VIDEO (Theory)

MODULE I Origin of Cinema -Persistence of Vision-Phi phenomenon-Maybridge, Edison-Kinetographe-Kinetoscope-George Albert Smith-Shots- Different types of shots-ELS,LS,MS,MCU,CU,ECU-Track,Pan,Tilt-Cinematographe - Lumiere brothers and George Melics.

MODULEII History of Editing – Edwin S Porter: Film Continuity-Griffith: Dramatic emphasis- Kuleshov experiment- Pudovkin : Constructive editing, , Eisenstein-Theory of montage-Early Sound Film- Synchronization of picture & Sound-Technological Limitations-Technical Improvements-Documentary Films-What is a documentary-Early documentary films – Dzigavertov: Experiment with realism-Man with a Movie Camera- Alexander Dovzhenko-Visual Association-Earth

MODULEIII Components of Film Camera -Working of a film camera- film formats and aspect ratio, Film projection-Lens-Focal Length & Perspective–F-stops & T-Stops- Focusing The Image-Depth of Field -Depth of Focus-Track shot & Zoom -Structure of Video Camcorder-Basic Settings-Picture Control-White Balance -Black Balance-Colour Temperature

MODULEIV Development of Television, The Nipkow Disk, The Cathode-Ray Tube, Mechanical television,Picture Scanning methods and reproduction,Transmitted Signal, different display system,ColorTelevision,High Definition Television

MODULEV Video Formats- Standard Definition and High Definition-Interlaced and Progressive-Frame Rate- Aspect Ratios-RGB,S-Video,Component and Composite-Colour Sub sampling-Bit Depth-Video Image-Time Code-Pixels and Resolution-Digital Compression Methods-Lossy and Lossless compression-Data rate-File Formats and Data Exchange-Recording Mediums – Tape,HardDisk,Flash Memory Cards, SSD- DVD & Blue Ray-Digital Cinema-2k,4K-DCP

REFERENCE

1. The Film Maker's Hand Book-Steven Ascher, Edward Pincuse
2. The Technique of Film Editing- Karel Reisz ,Gavin Millar
3. The Technique of Film & Video Editing -Ken Dancyger
4. Film Art: An Introduction : David Bordwell
5. Television Production Handbook : Roger Inman, Greg Smith
6. Television Technology Demystified- Aleksander Louis Todorovi'c
7. How Video Works – Marcus Weise
8. The EDCF Guide to Digital Cinema Production – Lasse Svanberg
9. High Definition Cinematography – Paul Wheeler
10. The Camera Assistant's Manual – David E. Elkins
11. American Cinematographer's Manuel

COURSE 2-5: SCRIPTWRITING AND STORYBOARDING

(Practical)

MODULE I Characteristics of a good motion picture story – Plot line – Protagonist – Antagonist – Characterization – Anticipation – Suspense – Surprise.

MODULE II Basics of short screen play – Image and Sound components – Organic structure – Dialogue for drama and motion picture – Method and format for a screenplay.

MODULE III Factors for writing a shooting script – Image and Sound formulations, View point, image size, movement etc. Form idea to shooting script.

MODULE IV Process and execution of storyboard from idea through script to storyboard, writing dialogue.

MODULE V Components of a storyboard – Concept & Function of Story board – Use of story board.

Practical Exam: Preparing a Story Board on a short script of 5mts duration.

REFERENCE

1.Directing the Story : Francis Glebas
2.Film Directing Fundamentals : Nicholas T. Proferes
3.The Art of the Storyboard : Joh Hart
4.The art of dramatic writing : Lajos Egri
5. Film techniques : V I Pudovkin
6.Screen play : Syed Field
7.The Short story – Its principles And Structure : Evelyn May Allbrigh
8.Aspects of Modern Short story : A.C. Ward
9.Story and Structure : Lawrence Perrie

Semester III

COURSE 3 -1: Digital Audio Workstation (Practical)

OBJECTIVE: This course is dedicated entirely to the designing of various audio programmes formats and its applications.

MODULE I MIDI-Connections-Controllers-Applications-Hardware requirements-Components-Daisy chaining &patch bay-Sequencer-Synthesiser-Workstation-Digital audio workstation-Standard midi file-MIDI messages and its classifications-General MIDI

MODULEII- Pro Tools-Pro tools hard wares, M-box micro, M-box mini. M-box pro, 001 rack, 002 rack, 002 control surface, 003 rack, 003 control surface. Pro tools HD, HD Pro, System configurations. Pro Tools window. New session, Edit window. Mix window, Transport window, time line, track, region, track input, track output, editing tools editing modes, nudge value, marker, scrolling, fade function, session saving, parameter settings, sampling rate setting, tempo and meter settings, track routing, buss, bus routing technique, software with digital console routing, analog to digital routing..

MODULE III JPEG audio formats, DSD IFF format, EDL files and project interchange, AES 31 format, MXF media exchange format, AAF advance authoring format, Disk Pre Mastering formats. Interconnecting digital audio devices-dedicated audio interfaces-PCI and PCIe audio interfaces, USB interfaces, IEEE1394 , Thunderbolt etc, MIDI synchronization with digital console,

MODULE IV Recording, Microphone placements, Digital recording, distractive recording, punch recording, loop recording, single track recording, multi track recording, segment recording, introduction about Digital editing, cutting, pasting, cleaning , level increasing , level decreasing, fading, cross fading.

MODULE V Introduction about mixing and live mixing, analog mixing, digital mixing, noise cancelling, equalizing, FX processing (reverb, delay) two track mixing, multi track balancing, multi track mixing, automation in digital console, automation in software, stereo mix down, bouncing,

Mastering technique.

Final Project: Mix and master a multitrack music session

Basic MIDI	:	Paul White
An Introduction to Pro tools	:	Frank D Cook
Producing great sound of film and video	:	Jay Rose
Sound and Recording	:	Francis Rumsey and Tim Mc Cormick
Practical Recording Techniques	:	Bartlett and Bartlett

COURSE 3-2 :EDITING PRINCIPLES (Theory)

OBJECTIVE: To clarify to the student the process of creating illusion of movement and the basic principles involved in narrating a visual story.

MODULE I Fiction and non-fiction – Film Form-Narrative form-Principles of Narrative form-Creative decisions-Plot and Story-Cause and effect- Time-Boundaries between Documentary and Fiction-Genres of documentary films-Genres in films-Goals of Editing-Plot Driven Film- Character Driven film-Dramatic Emphasis-Sub Text

MODULE II Time concept - Real Time and Filmic Time- Real space and Filmic space. - Graphic, Rhythmic, Spacial, Temporal Relations between Shots-Establishing and manipulating space-Flash Backs- Flash Forwards-Condensing and Expanding time-Suspense and Surprise

MODULE III Continuity- Spatial Continuity-180 Degree System- Imaginary Line/Axis of Action-Crossing the Axis-Cross Cutting- Temporal Continuity-Order and Frequency-Duration-Montage-Constructing a lucid continuity- Physical continuity - dress, look, movement, light, colour, tone - Matching consecutive actions-Image size and Angle-Directional continuity-Matching Image tone-Pace-Timing-Rhythm-Selection of shots-Jump Cut- Sound continuity-Theory of six-Emotional Continuity-Eye trace

MODULE IV The Practice of editing- Action /Chase Sequences- Dialogue Sequences-Comedy Sequences- Different types of Comedy-Montage Sequences - Documentaries- Reportage- Imaginative -Documentary film of ideas - Educational Films-Compilation Films-Newsreels-Use of sound in documentary

MODULE V Post Production Workflow- Linear and Non-Linear editing –Components of a NLE editing setup-Connectors -Media Files and Clips-Real time and Rendering- Online and Offline Editing-Online Workflow-Offline to Online workflow-Native Editing- Transcoding for Editing-Managing Media Files-Exporting File-Exporting for sound post production- Exporting to

Tape-Film based workflow-Shoot in Film, Transfer to Digital , Finish in Digital-Shoot in Film, Transfer to Video, Finish via Digital Intermediate-Film to Digital Transfer Methods-EDL, XML, AAF

REFERENCE

1. The Film Maker's Hand Book : Steven Ascher, Edward Pincus
2. Film Art: An Introduction : David Bordwell
3. The Technique of Film Editing : Karel Reisz& Gavin Millar
4. The Technique of Film & Video Editing History,Theory and practice : Ken Dancyger
5. Editing film and Videotape : BBC Training Manuel
6. Films and the Director : Don Livingston
7. Film and its Techniques : Raymond Spolliswoode
8. Film Techniques and Acting : Pudovkin
9. Independent Film making : Lenny Lipton
10. The Liveliest Art : Arthur Knight
11. Film Form : Eisenstein
12. Video Tape Editing : Steven E Brown
13. Hand Book of motion picture Production : Willian B Adams
14. Video User's Hand Hook : Peter Utz

COURSE 3 -3: SHOOTING METHODS (Practical)

MODULE I The Shot, Different Types of Shots, Basic Composition for video- Framing Human Subjects, The Rule of Thirds, Camera Angles, Two and three shot, OSS.

MODULE II Video Camera Operation - Familiarizing with a video camera - Basic camera controls & settings - Exposure, White balance, Framing and focus - Video camera operation -Practical's.

MODULE III Composition - Creating third Dimension- Depth of Film Space- Effect of Lens and light on images. Shooting for Editing- Continuity- Imaginary Line concepts- Eye-Line Match.

MODULE IV Dynamic Shots- Camera Movements- Handheld - Pan and Tilt - Tripod, Dolly etc. Focus Effects- Lens Perspective and Characteristics.

MODULE V Structuring Scene – Dramatic Emphasis – Master Scene Techniqueand Misc-in scene- Shot/Reverse Shot- Action Scenes – pre-record sound track Ad. Films etc.– Dialogue Scenes- Play-back etc.

Project

Practical : Group Exercise: - Shoot a 5 mts dialogue Scene, Action Scene – Song etc and individually edit.

REFERENCE

1. Cinematography -Theory And Practice : Blian Brown
2. How to shoot a movie & video story : Arthur L Gaskill
3. Video Production Handbook : Gerald MilJerson
4. Grammar of the Shot : Roy Thompson
5. Motion Picture and Video Lighting : Blian Brown
6. Painting With Light : John Alton
7. The 5 C's of Cinematography : Joseph MasceJIi
8. Practical Cinematography : Paul Wheeler

COURSE 3-4: DIGITAL AUDIO FUNDAMENTALS (Theory)

Objective :

This course is designed for practical understanding of Digital electronics, electronic devices and their function

MODULE I Digital electronics- The binary number system, Basic logic Gates and applications, computers and time, Digital audio- The theory, PCM, Sampling, Quantisation, Bit depth, Sample rate Conversion-Nyquist theorem- Analog to digital, Digital to analogue.

MODULE II Introduction to various audio file formats, Advantages and disadvantages, features etc.-Compressed and uncompressed audio, Lossy and lossless compression, AIFF and AIFF C format, BWF format, RIFF-WAVE format. Multitrack digital audio recorders-DASH, R-DAT, ADAT.

MODULEIII Introduction to digital consoles, routing, Digital audio Interconnection-SPDIF, AES/EBU, ADAT. Audio codec-AC3,AAC. multiplexing and DE multiplexing, digital recording, Use of digital circuits in various audio equipment.

MODULEIV Introduction to computer basics- peripheral devices,Block diagram of a computer IO Devices-Keyboard,mouse,printers-scanners – webcam-Introduction to all internal devices-Mother Board, MB Types, Expansion Slots, Processor, Memory, Hard Disk, CD-R,RW, DVD-RW. SMPS, Introduction of Expansion Card,sound cards,Graphics cards assembling of Personal Computer.Complete Introduction and troubleshooting-Monitor, LCD, Keyboard, Mouse, UPS.Installation of O/S and application software,updating the softwares.

MODULEV Introduction to Computer Hardware managment and Networking-Downloading the hardware drivers from internet, Installation of drivers, updating the drivers, driver compatiblity. Network components, Modems, Routers,Hubs, Switches, types of network LAN,WAN,MAN, troubleshooting of network , Studio LAN, IP audio, The digital audio studio, Digital release formats and digital file distribution.

REFERENCE

Upgrading and Repairing PCs (22nd Edition): Scott Mueller
Digital Electronis by Thomas Floyd
An introduction to digital Audio : John Watkinson

COURSE 3-5: EDITING STUDIO (Practical)

MODULE1 Basic Shot Types, Increasing Shot Complexity, Developing Shots-Selecting the Best Shots, Screen Direction, Matching Angles.

MODULEII Editing Basics- Rough Cut, Cutaways and Reaction Shots, Matching Action and Screen Position, Overlapping Edits, Matching Emotion and Tone, Transitions Between Scenes, Fine Cutting.

MODULE III Factors to make a Good Transition Edit, Information, Motivation, Composition, Camera Angle Continuity, Sound, Transitions.

MODULE IV Setting Up a Workstation, Video Cables and Connectors, NLE interface, Organizing the Media, Importing and Transcoding, Capturing Tape, Importing Audio and images.

MODULE V Editing Tools, Drag-and Drop-Three-Point, Insert and Overwrite Editing etc. Trimming, Ripple and Roll, Slip and Slid Effects and Titles, Audio-Effects and Filters, Mixing, Finishing Tools.

Practical Project: Shoot a 5 mts. Fiction /non fiction and present a finished programme with Titles, Graphics, Transitions etc. (Individual).

REFERENCE

1.The Technique of Film and Video History, Theory and Practice : Ken Dancyger

2.Cutting Rhythms : Karen Pearlman

3.Film Technology in Post Production : Dominic Case

4.Grammar of the Edit : Roy Thompson

5.The Technique of Film : Karl Reiz

6.Film Technology in Post Production : Dominic Case

7.Make the Cut : Lori Jane Coleman

8.The Digital Film making Handbook : Sonja Schenk

9.Nonlinear Editing : Bryce Button

COURSE 4 -1 : VISUAL EFFECTS STUDIO - I (Practical)

UNIT 1 Brief History of Motion Graphics, Exploring the VFX Softwares, Exploring Advantages of Vfx. File Formats

MODULE II Workspace of software, Oraganising new project, Creating composition, Import footage, Adding footage and layered files, Animating Opacity, Scale, and Rotation, Spatial keyframes and motion paths, Alpha channel, Animation using images and Types, Appling Effects and Presets, Animation Using Key frame and Graph Editor, Rendering.

MODULE III Basic Painting-Blending Modes, Using Blending Modes with different layers, Adjustment Layers, Basic Colour Grading, Colour balancing of footages, Using Camera and lights, 3D space Moving, Usage of Masks and Mattes, Concepts in Parenting, Nesting and Expressions, Time stretching and freezing.

MODULE IV Chroma keying, Using of Different keying Methods, Using of Mattes, Lighting Techniques (Shooting Techniques), Green Screens in Live Broadcasts, Garbage and Degrain mattes, Morphs, Rig and Wire Removal.

MODULE V Primary and Secondary Color Correction, Vignettes, Correcting and Matching Shots, Tracking, stabilization and Motion keying, Usage of track points, Camera tracking with footages, Cloning, Changing backgrounds using mask and tracking, Usage of Rotoscoping Brush.

REFERENCE

1. Adobe After Effects CS5 - Visual Effects and Compositing Studio Techniques : Mark Christiansen
2. Motion Graphics with Adobe Creative Suite5 Studio Techniques : RichardHarrington and Ian Robinson
3. Motion Graphic Design- Applied History and Aesthetics : Jon Krasnei
4. Digital Compositing for Film and Video : Steve Wright
5. VFX Artistry, A Visual Tour of How the Studios Create Their Magic -Spencer Drate& Judith Salavetz
6. The Green Screen Handbook : Real – World Production Techniques – Jeff Foster.

COURSE 4-2: SOUND PRODUCTION AND REPRODUCTION -1 (Practical)

OBJECTIVE : This course is designed for practical understanding of audio recording and editing console and its work flow and reproduction formats.

MODULE I Dubbing – narration, commentary etc

MODULE II Dubbing and multi track recordingMulti track dubbing

MODULE III Multi track FX recording, Re-recording and final mix

MODULE IV FX- pre-mixing, BGM mixing, Multi track FX mixing and multitrack BGM mixing.

MODULE V Final mixing and Mastering

Multi track voice levelling with mixing, multi track FX mixing ,Multi track BGM mixing, Bouncing and Mastering.

Project : Use Video from the film Library.Individually do the multi- track recording for a short visual presentation of 5 mtsduration.(Mono/Stereo)

REFERENCE

1. Handbook of sound engineers : Ballou Glen
2. Sound recording practice : Borwick John
3. Sound Studio : Ford Tyree S.
4. Sound FX : Alexander U. Case
5. The Sound Effects Bible : RicViers

COURSE 4 -3: EDITING STUDIO II (Practical)

MODULEI Advanced editing softwares- Avid/Fcp/Media 100/Lightworks. Tools and Workflow-Files and Relation ships-Project Window and Editing Interface, Playing and Marking Clips, Creating Sequence, Subclips, Timeline Editing Methods.

MODULE II Trimming- Types Process, Performing Trims, Slipping and Sliding, Split Edits or L-Cuts, Sync Problems, Match Frame, Locators, Locking Tracks, Extend edit, Replace edit, Freeze Frames , Motion Effects.

MODULE III Audio Editing- Importing audio.Adding and Patching Tracks. Adjusting Level and Pan, Using Keyframes in audio, Adding audio effect, Audio recording in NLE, Different video effects and its usages, Basic Color Correction, Creating Titles, Managing Project and Media, Delivering the Finished Work.

MODULEIV Concept of Rhythm, Thinking and Perceiving Rhythm, Physical, Emotional, and Event Rhythms- Music to Movement, Dancing Edits.

MODULE V **Practical Exam:**

Picturisation & Editing of pre-recorded song of about 3 - 4 mts.

Group Exercise - Editing individually.

REFERENCE

1. The Technique of Film and Video- History, Theory, and Practice - Ken Dancygcr
2. Cutting Rhythms - Karen Pearlman
3. Film Technology in Post Production- Dominic Case
4. Grammar of the Edit-Roy Thompson
5. The Technique of Film- Karl Keez
6. Film Technology in Post Production- Dominic Case
7. Make the Cut -Lori Jane Coleman
8. The Digital Filmmaking Handbook- Sonja Schenk
9. Nonlinear Editing - Bryce Button
10. The Avid Handbook - Greg Staten

COURSE 4- 4: MEDIA MANAGEMENT (THEORY)

OBJECTIVE

The course provides a basic know-how in modern management concepts and it further moves on to the managerial aspects of mass media. Those who are seeking a career in the management structure of mass media may get a good opportunity to expose themselves to this emerging field.

MODULE I Management: Concept and scope; Principles of management; Theories of management; Human resource of management; Finance management; New trends in management.

MODULE II Media Management: Concept, Need and scope; Principles of Media management; Media as an industry and profession; New trends and legal issues in media management.

MODULE III Media Organization: Organizational Structure; Function of various departments; Personnel Management; Financial Management; Audience Research; Media legislation, regulation and governance.

MODULE IV Print & Electronic media management: News management; Editorial Management; Programme planning and Production; Resource planning and resource structure; Branding & Marketing; Public relations & Advertisement.

MODULE V Research Methodology: Definition and Objectives, Research Process, Tools and methods of Data Collection, Types of research in Print, Electronic and New Media, Writing Thesis and Dissertation.

REFERENCE

1. Laws of Press in India : DurgadasBasu
2. Managing in the Media : Block et al
3. Law Relating to Publishers and Printers : P.C Sarkar
4. Newspaper organisation and management : L. W. Ruckerr and Williams
5. Newspaper Management in India : Gulab Kothari
6. Managing Electronic Media : Czech Beckerman
7. Media and Communication Management : C R Rayudu
8. An introduction to Research Methodology : B.L. Garg, R. Karadia and F.Agarwal

COURSE 4-5: LIVE SOUND REINFORCEMENT (Practical)

MODULE 1 - Technical Rider

Learn how to read and draw a Technical Rider of a band or a show, signal flow.

MODULE 2 - Signals and Transmission

Signal dynamics-noise, SNR, distortion/clipping, headroom, dynamic range. Different signal levels - mic level, line level, speaker level. Types of cables – mic cable, line cable, speaker cable. Types of connectors – TS,TRS, XLR, RCA, Speakon. Balanced and unbalanced signal, DI box, snake cables .

MODULE 3 - Mixer

Gain structuring. Channel strip - gain, HPF, EQ, pre/post auxiliary, pan, PFL/AFL, mute, fader . Grouping. Master fader. VU meter.

MODULE 4 - Amplifier and Speakers

Concept of active and passive components, Power Rating - RMS, program, peak. Speaker and amplifier power matching, impedance matching, bridge connection.

MODULE 5 - Signal Processors

Types of EQ - graphic EQ, parametric EQ, semi-parametric EQ, shelving EQ. Types of audio filters - HPF, BPF, LPF, notch filter. Types of dynamic processors - gate, compressor, expander, limiter. Types of effects processors - delay, reverb, chorus. Crossover.

REFERENCES

1. Live Sound Reinforcement : Scott Hunter Stark
2. Sound Reinforcement Handbook : Gary Davis & Ralph Jones

SEMESTER V

COURSE 5-1: ENVIRONMENTAL STUDIES AND HUMAN RIGHTS (THEORY)

OBJECTIVE

Environmental Education helps students to understand how their decisions and actions affect the environment, builds knowledge and skills necessary to address complex environmental issues, as well as ways we can take action to keep our environment healthy and sustainable for the future. It encourages character building, and develop positive attitudes and values**.**

MODULE 1

Multidisciplinary nature of environmental studies: Definition, scope and importance - Need for public awareness.

Natural Resources: Renewable and non-renewable resources: Natural resources and associated problems. **a) Forest resources**: Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forest and tribal people. **b) Water resources**: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. **c) Mineral resources**: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. **d) Food resources**: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. **e) Energy resources**: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, Case studies. **f) Land resources**: Land as a resource, land degradation, man induced landslides, soil erosion and desertification - Role of individual in conservation of natural resources - Equitable use of resources for sustainable life styles.

Ecosystems: Concept of an ecosystem - Structure and function of an ecosystem - Producers, consumers and decomposers - Energy flow in the ecosystem - Ecological succession - Food chains, food webs and ecological pyramids - **Introduction, types, characteristic features, structure and function of the given ecosystem: -** Forest ecosystem

MODULE 2

Biodiversity and its conservation: Introduction - Biogeographical classification of India - Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values -India as a mega-diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts - Endangered and endemic species of India

Environmental Pollution: Definition - Causes, effects and control measures of: - (Air

pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution) - Nuclear hazards - Solid Waste Management: (Causes, effects and control measures of urban and industrial wastes) - Role of an individual in prevention of pollution - Pollution case studies - Disaster management: floods, earthquake, cyclone and landslides.

Social Issues and the Environment : Urban problems related to energy - Water conservation, rain water harvesting, watershed management - Resettlement and rehabilitation of people: its problems and concerns, Case studies - Environmental ethics: Issues and possible solutions - Climate change, global warming, acid rain, ozone layer depletion , nuclear accidents and holocaust, Case studies - Consumerism and waste products - Environment Protection Act -Air (Prevention and Control of Pollution) Act - Water (Prevention and control of Pollution) Act - Wildlife Protection Act -Forest Conservation Act -Issues involved in enforcement of environmental legislation - Public awareness

MODULE 3

Sound pollution -Dynamic range of hearing– Amplitude, frequency, Threshold of hearing, threshold of pain. Causes of Sound pollution – Industrialization, poor urban planning, social events, Transportation, Construction activities, Household chores, Effect of Sound pollution - Hearing problem, Health issue, Sleeping disorder, Cardiovascular issues, Trouble communicating, Effect on wild life. Prevention of Sound pollution

MODULE 4

Media and environment: Media coverage of environmental issues; Agenda setting of environmental risks and its presentation, Role of various media in establishing and maintaining perspectives on environment; tendencies and limitations of green journalism; Media as bridge between science and public.

MODULE 5

Human Rights– An Introduction to Human Rights, Meaning, concept and development, Three Generations of Human Rights (Civil and Political Rights; Economic, Social and Cultural Rights).

Human Rights and United Nations – contributions, main human rights related organs UNESCO, UNICEF, WHO, ILO, Declarations for women and children, Universal Declaration of Human Rights.

Human Rights in India – Fundamental rights and Indian Constitution, Rights for children and women, Scheduled Castes, Scheduled Tribes, Other Backward Castes and Minorities

Environment and Human Rights - Right to Clean Environment and Public Safety: Issues of Industrial Pollution, Prevention, Rehabilitation and Safety Aspect of New Technologies such as Chemical and Nuclear Technologies, Issues of Waste Disposal, Protection of Environment

Conservation of natural resources and human rights: Reports, Case studies and policy formulation. Conservation issues of western ghats- mention Gadgil committee report, Kasthurirengan report. Over exploitation of ground water resources, marine fisheries, sand mining etc.

Internal: Field study

- Visit to a local area to document environmental grassland/ hill /mountain
- Visit a local polluted site – Urban/Rural/Industrial/Agricultural Study of common plants, insects, birds etc
- Study of simple ecosystem-pond, river, hill slopes, etc

Reference

1. Bharucha Erach, Text Book of Environmental Studies for undergraduate Courses. University Press, IInd Edition 2013 (TB)
2. Clark.R.S., Marine Pollution, Clanderson Press Oxford (Ref)
3. Cunningham, W.P.Cooper, T.H.Gorhani, E & Hepworth, M.T.2001 Environmental Encyclopedia, Jaico Publ. House. Mumbai. 1196p .(Ref)
4. Dc A.K.Enviornmental Chemistry, Wiley Eastern Ltd.(Ref)
5. Down to Earth, Centre for Science and Environment (Ref)
6. Heywood, V.H & Watson, R.T. 1995. Global Biodiversity Assessment, Cambridge University Press 1140pb (Ref)
7. Jadhav.H & Bhosale.V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284p (Ref)
8. Mekinney, M.L & Schock.R.M. 1996 Environmental Science Systems & Solutions. Web enhanced edition 639p (Ref)
9. Miller T.G. Jr., Environmental Science, Wadsworth Publishing Co. (TB)
10. Odum.E.P 1971. Fundamentals of Ecology. W.B. Saunders Co. USA 574p (Ref)
11. Rao.M.N & Datta.A.K. 1987 Waste Water treatment Oxford & IBII Publication Co.Pvt.Ltd.345p (Ref)
12. Rajagopalan. R, Environmental Studies from crisis and cure, Oxford University Press, Published: 2016 (TB)
13. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut (Ref)
14. Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell
15. Science (Ref)
16. Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Stadards, Vol I and II, Enviro Media (Ref)
17. Trivedi R. K. and P.K. Goel, Introduction to air pollution, Techno-Science Publication (Ref)
18. Wanger K.D., 1998 Environmental Management. W.B. Saunders Co. Philadelphia, USA 499p (Ref)
19. (M) Magazine (R) Reference (TB) Textbook

Human Rights

1. Amartya Sen, The Idea Justice, New Delhi: Penguin Books, 2009.
2. Chatrath, K. J.S., (ed.), Education for Human Rights and Democracy (Shimla: Indian Institute of Advanced Studies, 1998)
3. Law Relating to Human Rights, Asia Law House,2001.
4. Shireesh Pal Singh, Human Rights Education in 21st Century, Discovery Publishing House Pvt.Ltd, New Delhi,

5. S.K.Khanna, Children And The Human Rights, Common Wealth Publishers,1998. 2011.
6. Sudhir Kapoor, Human Rights in 21st Century,Mangal Deep Publications, Jaipur,2001.
7. United Nations Development Programme, Human Development Report 2004: Cultural Liberty in Today's Diverse World, New Delhi: Oxford University Press, 2004.

COURSE 5-2 : MULTI CAMERA- SHOOTING, RECORDING & EDITING (PRACTICAL)

MODULE I Introduction to Multi Camera Setup

MODULE II Shooting & Recording a Multi Cam programme-Fiction/Non-fiction- Online Editing using Vision Mixer

MODULE III Multi Camera Editing using Editing Software Avid/ FCP/Premiere

MODULE IV Shooting, Editing & Mixing a Live programme

MODULE V **Project**: Shoot and Record a 3-5 minute Multicam television programme

REFERENCE

1. AVID Handbook
2. Mastering Multi Camera Technique : Mitch Jacobson
3. Television production handbook : Roger Inman, Greg Smith
4. Adobe Premier pro user manual
5. Final cut pro user manual

COURSE 5-3: SOUND PRODUCTION AND REPRODUCTION -II (Practical)

MODULE I Dialogue Editing-getting sound from the picture dpt. to the sound dept,File names and Backup,Screening the OMF,Postconfirm -The spotting session, Image -Depth and perspective,DamageRepair,Production effects and guide tracks,confirmation,ADR,Editing sound for Documentaries, Preparing for the Mix,

MODULE II Sound Editing -Effects and Ambience recording/Tracklaying

MODULE III Folley Editing-Folley recording/Tracklaying

MODULEIV Pre Mix-Dialogue Premix, Effects Premix, Ambience Pre mix, Folley Premix, Music Premix,

MODULE V Final Mix-DAW-Projectfilesetup,Various Mixing Formats-Mono, Stereo and Surround Sound.

Project: Use Video from the film Library. Individually do the multi-track recording for a short visual presentation of 5 mts duration. (Surround)

REFERENCE

Dialogue editing for motion pictures John purcell
Sound Design David sonnenschein
Dolby Tutorials
Auro 3D Tutorials
DTS Tutorials

COURSE 5-4: DIGITAL CINEMA EDITING (Practical)

MODULE I Stories and Their Purpose, Reading Screen play and Shooting Script, Planning the Editing - Pace and Time of the Scenes - Visual structure of the film-plot line to climax.

MODULE II Overview of editing process, Editing on Film, Editing on Video, Procedures in the Editing Room- Setting Up the Project, Import FX and MX, Importing Dailies, Digitize and Organize, Archiving, Editor's Cut, Temp ADR, Scene Timings, Building a Cut, Director's Cut.

MODULE III Cutting Picture and Sound, Film Edit - Synching, First Assembly, Countdown Leaders, NLE Edit- Synching Up, Dialogue Cutting, Overlapping Cuts, Sync Film Cutting, Cutting Nonsync Sound and Picture, A & B Rolling-Sync Sound, Audio Finishing.

MODULE IV Finishing Film, Final Sound Mixing, The Final Print, The Digital Intermediate, Digital Media Acquisition, Conforming.Color Grading, Retouching and Restoration, Digital Effects and Titles, Output and Quality Control

MODULEV Color and Mastering for Digital Cinema, Color in Motion Picture Film, Color Space for Digital Cinema, Digital Mastering, Digital Display Technologies - Editing and finishing a 24 p production (Practical) 5 mts.

Project: Shooting and Editing a 5 mts 24 frame production.

REFERENCE

I. How To Shoot A Feature Film : Bert Stern

2. Film Directing Fundamentals : Nicholas T.Proferes

3. Digital Cinema -The Revolution in Cinema : Brian McKernan

1. Digital Intermediates for Film and Video : Jack James

2. Film Production Technique- Creating the Accomplished Image : Bruce Mamer

6. How to Shoot a Movie (& Video) Story : Arthur L Gaskill

7. The Technique of Film and Video-History,Theory,and Practice : Ken Dancyger
8. Cutting Rhythms : Karen Pearlman
9. Film Technology in Post Production : Dominic Case
I0. Grammar of the Ed it : Roy Thompson
11. The Technique of Film Editing : Karl Reize
12.Film Technology in Post Production : Dominic Case
13.Make the Cut : Lori Jane Coleman
14.The Digital Filmmaking Handbook : Sonja Schenk
15.Nonlinear Editing : Bryce Button
16. The Avid Handbook : Greg Staten
17. Avid Editing : Sam Kauffmann
18. 24P -Make Your Digital Movies Look Like Hollywood : Pete Shaner and Gerald Everett

COURSE 5-5 (A)
MUSICAL INSTRUMENT DIGITAL INTERFACE(MIDI)

Module 01 - Introduction to MIDI – Definition, Application of MIDI, MIDI interface, MIDI Cables and post connection, MIDI Machine control, VST/RTAS.

Module 02 - Recording MIDI Tracks - Basic MIDI editing techniques**,** The graphic editor, Level of Undos, The list editor, The score editor**,** Basic principles of MIDI note quantization.

Module 03 – Synchronization - Synchronization between transport, Time code**,** Sync using SMPTE time code**,** MIDI based synchronization**,** Master Slave relationship, Synchronization with keyboard and rhythm composer.

Module 04 - Elements of MIDI orchestration - The rhythm section, Drums and percussion, The string section, Wind instruments**,** Sequencing strings, Sonorities and sound libraries, Panning and reverb settings .

Module 05 - The final mix - MIDI sequencing, MIDI Song, Track organization and submixes, The "rough" mix, Panning, Balance, Frequency placement, Reverberation and ambience effects, Equalization, Dynamic effects: compressor, limiter, expander, and gate, Bounce to disk

Reference

Andrea_Pejrolo_-_Creative_Sequencing_Techniques_for_Music_Production

The Beginner's Guide to MIDI by Craig Patterson

Creative Sequencing Techniques for Music Production A Practical Guide to Pro Tools, Logic, Digital Performer and Cubas Dr. Andrea Pejrolo

COURSE 5-5(B)

VISUAL EFFECTS STUDIO - II (Project)

OBJECTIVE Visual Effects Studio-II is a continuation of "4-1 Visual Effects Studio-I". This course introduces the student to advanced tools and compositing techniques. The main objective of this course should be to help the students solve any challenges they would face with respect to compositing.

MODULE I Chroma key compositing - Principles of chroma key compositing, Pulling the matte using keyer. Despill operation to avoid blue spill contamination(hue operation), Garbage mattes to support keying, Colour correction and composite the foreground and background, Chroma shoot, Materials using for chroma screen, Lighting techniques for chroma shoot, Shooting the chroma. Advantages of video cameras with little compression(4:2:2,4:4:4) for chroma shoots, motion tracking in chroma screen for camera movements

MODULE II Creating masks - Luma key, Chroma key, Difference mask, Color difference mask, Geometric primitive masks, Spline based manual drawing masks, Painting a mask

MODULE III Rotoscoping - Uses and advantages of rotoscoping, Creating rotos with splines, Hierarchical parent and child roto shapes, Interpolation technique, Keyframerotos, Final inspection, Rotoscope motion blur and semi transparency

MODULE IV Image blending - The mix operation, Multiply operation, Screen operation, Maximum operation, Minimum operation, Add operation, Subtract operation, Speed operation. Animation - Keyframe animation of layers using translation, Pivot, Rotation, Scale, Skew, Shear, Corner pin layer operations, Key frame animations, Stabilizing a shot, planar tracking

MODULE V Other VFX applications - Morphing, Wraps, Adding atmospheres, Crowd duplication, Wire removal, Basics of stereo compositing.

REFERENCE

Compositing Visual effects : Steve Wright
Digital Compositing for Film and Video : Focal Press

COURSE 5-5(C)
INTRODUCTION TO GRAPHIC DESIGN-I(PRACTICAL)

OBJECTIVE

To provide the students the initial information on designing what is seen in a frame.
To understand basic elements and principles in design
To understand designing in raster graphics application and also image editing or enhancing techniques

MODULE I Basic elements and concepts of visual design - Line, texture, colour, form - Composing an image.

Introduction to colour - Colour classification - Additive and subtractive - Dimensions of colour like hue, Value - Meaning of colour - Psychological use of colours. Introduction to typography - History of type - Type classification - Designing with type - Legibility and readability.

MODULE II Principles of design – Balance, Proportion, Rhythm, Emphasis, Unity etc. Gestalt principles

MODULE III Digital Image- Pixels – Bit Depth – DPI – LPI - Resolution - File Formats (Print and screen Formats - GIF, JPEG, TIFF, etc.) - Compression: Lossy - Lossless - Raster and Vector Images - Colour: Colour modes-CMYK-RGB - Process colour - Spot Colour - Colour systems. Duotones - Tritones - Quadratones etc.

MODULE IV Raster graphic software: Interface – Creating Documents – Toolbar – Panels and palettes - –concept of layers-selection tools - Pen – Brush - Transform Tools - Dodge Tool – Colour Sampler – Gradient Tool – Marquee Tool –Custom Shapes –Type – Clone Stamp Tool –Magic Wand Tool etc

MODULE V **Design Projects:** Design variuos type of posters: propaganda , event, commercial etc. It must reveal the application of design principles.

Image Editing Project: photo restoration technic- Colour correction methods- treatement of RAW files and its processing etc.

REFERENCE

1. Adobe Photoshop Classroom in a Book : Adobe Creative Team
2. Stop Stealing Sheep and Find Out How Type Works : Erik Spiekermann, EM Ginger
3. Designing with Type: A Basic Course in Typography : James Craig, William Bevington, Susan E. Meyer
4. The elements of Graphic design : Alex W. White

SEMESTER VI

COURSE 6-1:FINAL PROJECTS/INTERNSHIP

6-1: INTERNSHIP

OBJECTIVE

To acquire practical industry based experience

Internship is on the job training to assimilate the professionalism in a career. Internships offer students a period of practical experience in the industry relating to their field of study.

The students will have to undergo an Internship at a**Audio Studio / Television Channel / Radio / Film** for a fortnight at the beginning of the sixth semester.

The students would prepare individual reports after the Internship and the same should be attested by the organization under which the student did the internship. The students' comprehensive report will be submitted to the HOD for evaluation. A faculty member will monitor the students during the internship.

SEMESTER VI

COURSE6-2 - FILM APPRECIATION (Practical)

MODULE I What is a Movie – Ways of Looking – Principles of Film form – Fundamentals of Film Form – Realism and other forms. Language of Cinema, Types of Movies – Genre – Evolution and Transformation of Genre - How Films Are Made –

MODULE II Principles of Narrative Construction Classical Structure – Dialectical Form -Plot and Story, Cause and Effect, Time, Space etc. Mise-en-Scene – Master Scene- Cinematography – Colour – Tonal value.

MODULE III Acting - The nature of Screen Acting, Stanislarsky Method Acting and creativity – Aspects of Performance, Actor and Film making, Editing (Continuity, Jump Cut, Dissolve, Fade etc.) Different editing styles – Creativity in Editing.

MODULE IV Sound and Visuals – Functions of Film Sound – Sync Sound – Sound as Counter point - Creative use of Sound.

MODULE V Film History and Film Language – Cinema aesthetics, Technological and Economic Approaches – Silent era – Talkie films, Italian Neorealism, French New Wave – and other forms – Science Fiction films – Emerging New Cinemas.

Project: Analysis of a short fiction/non fiction film to be submitted on record book. (Select a film not exceeding 30 mts duration)

Follow the Method of Analysis. Faculty will provide the standard Analysis Scheme.

REFERENCE

1. Film: A Critical Introduction – Maria Paramaggiore
2. How to Read a Film – James Monaco
3. FILM ART – AN INTRODUCTION : David Bordwell and Kristin Thompson
4. FILM HISTORY – An Introduction : Kristin Thompson and David Bordwell
5. The Oxford History of World Cinema – Geffrey Nowell
6. The ART of Watching FILMS – Dennis W Petrie and Joseph M .Bogges
7. Art and Visual Perception – Rudolf Arnheim
8. Film Criticism – Marie Seton
9. Their Films, My Films – Satyajit Ray
10. Cinema and I – RitwikGhatak

COURSE6-3

MULTI CAMERA VEDIO PRODUCTION (PROJECT)

1. A single show will be shot under the guidance of a

2. Each student will edit the video footage individually.

3. The duration of the show will be of 3 minutes

4. Each student will prepare and submit a shooting script and story board for given video shoot and submit.

5. The marks for the pre-production will be awarded as follows.

a. Shooting Script	-	10
b. Storyboard	-	5
Involvement in Group work	–	5
Internal assessment: Total	–	20 Marks

The work will have to be completed as per the dates and deadlines issued by the supervising faculty. Written materials are to be submitted in a record book along with the completed film for evaluation by the university examiner.

2. The project prepared by the student will be assessed by the university as follows: -

a. Record book	-	20
b. Project	-	40
c. Viva	-	20
External Evaluation: Total	-	80 Marks

COURSE6-4 MULTICHANNEL AUDIO RECORDING AND MIXING

A single show will be recorded under the guidance of a faculty.

2. Each student will mix and master the show individually.

3. The duration of the show will be of 3 minutes

4. Each student will prepare and submit a technical rider for given live recording and submit.

5. The marks for the pre-production will be awarded as follows.

a. technical rider	-	10
b.Involvement in the set up and tear down	–	10
Internal assessment: Total	–	20 Marks

The work will have to be completed as per the dates and deadlines issued by the supervising faculty. Written materials are to be submitted in a record book along with the completed film for evaluation by the university examiner.

2. The project prepared by the student will be assessed by the university as follows: -

a. Record book	-	20
b. Project	-	40
c. Viva	-	20
External Evaluation: Total	-	80 Marks

COURSE6-5 OPTIONAL CORE(PROJECT)

(A) Location Recording (Practical)

Objective

To understand basics of location sound ,
To familarize with various recording equipment in the field
To understand audio level and other parameter
To be able to record clean and undistorted sound in the field
Understanding Microphones /Polar patterns designed for location sound

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MODULE I

Location Recorder,Location Microphone,Field mixer,Boom and Boom Operation

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MODULE II

Creative aspect of Location Recording, Script analysis, Recce,Technical requierments.

MODULE III

Synchronization and Transfers ,Timecoddes-SMPTE Timecode,MIDI Timecode,Time formats With Computer-Based Recorder /Editor.Synchronizing Digital Equipment,Framerates.

MODULE IV

Synchronizing Sound and Picture-Timecode synchronization,Head and Tail Synchronization Points.Location recorders,Microphones,Location recording.

MODULE V

Transfers -Digital to digital Audio Transfers .Transferring Audio Files for Accompanying Video,Altering Audio in Transferring for Special Effects

Project: Shooting and Editing a 5 mts 24 frame production.

(C)

(B) 3D EDITING (Practical)

MODULE I Technical History of Stereo cinema, Stereopsis and Stereoscopy, History of Stereoscopic Projection.

MODULE II Overview of 3D- the formation of the stereoscopic image, Stereoscopic Vision and 3D Cinematography The 3-D FORMATS Common 3D Productions, 3D Photography, Displays, Computers.

MODULE III 3D Cinematography- -Depth Perception - Parallax , Lenses, Focus and Depth, Lighting, 3D camera setup.

MODULE IV 3D editing, 2D and 3D editing, working with stereoscopic clips, viewing 3D footage, corrections to 3D clips, editing and adding effects in 3D, color and depth grading , out putting 3D projects

MODULE V Project: Individually prepare a 3 mts programme incorporating the 3 D principles.

REFERENCE

1. 3D Movie Making- Stereoscopic Digital Cinema from Script to Screen; Bernard Mendiburu
2. 3D TV and 3D Cinema- Tools and Processes for Creative Stereoscopy : Bernard Mendiburu
3. The World of 3-D Movies : Eddie Sammons.
4. Stereoscopic Cinema and the Origins of 3-D Film, 1838 -1952: Ray Zone
5. Foundations of the Stereoscopic Cinema - A Study in Depth : Lenny Lipton

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(C) RADIO PROGRAM PRODUCTION (PROJECT)

OBJECTIVE: This course is dedicated entirely to the designing of various audio programmes formats and its applications.

MODULE I Programme formats- Basic elements of an audio programme- word, music, effects, silence etc. selection of format- requirements of theme, target audience, nature and objectives of the programme, available resources, time etc.

MODULE II **Spoken word programmes-** Talks and discussions, interviews. Drama, Feature and documentaries, Magazines, Commentaries, Talk shows, quiz. Advertisements, reports, poetry recitation, Interactive programmes, News based programmes- News Bulletins, News magazines, newsreels. **Music programmes-** Vocal, instruments. Musical concerts- Classical and light, musical operas, musical magazines etc.

MODULE III Presentation techniques- objective technique, subjective techniques - personalised presentation, aggressive presentation. Categories of presenters- news reader, announcer, compere etc. Requirements for a presenter- modulated voice, proper pronunciation, proper delivery, alertness, microphone manners, general knowledge, love for broadcasting etc. Type of listeners - Active listener, passive listener.

MODULE IV Script writing for various presentation formats, Preparing scripts- simple spoken language, effective use of emotions and feelings, speed and rhythm etc. Marking symbols in the script - pauses, modulation, highlighting, breaking long sentences, connecting sentences etc,

MODULE V Workshop on Drama production.

Final Project: Recorded programme of 10 mts duration for Radio

REFERENCE

Radio Production	Robert McLeish
The Great Radio Heroes	McFarland & Co.
A World in Your Ear	Broadside Books
Script writing for radio and Television	Burger Aruthur Asa

COURSE6-6 DEMO REEL PRESENTATION (PROJECT)

OBJECTIVE

Demo reel presentation is intended to assist the student to prepare for a job interview. Student will have to present his/her demo reel which is a culmination of their original works or of their area of expertise. The faculty will share tips and strategies to create an engaging demo reel and to face a job interview successfully. The demo reel should be in video/audio format or a website or in print format. The student is free to use his/her individual creative style to present the final demo reel.

MODULE 1

Preparing for an Interview- Research the organization, Compare your skills and qualifications to the job requirements, Prepare responses, Plan what to wear, Plan what to bring, Pay attention to nonverbal communication, Follow up. How to write a successful Media CV?

MODULE 2

What is a demo reel? Tips to create a successful demo reel - Keep it short, Make it specific, Choose a style - Collage or samples, Put your best work first, Your work only, Slate it - Include contact details at the start or the end of the demo reel, Showcase your involvement, Highlight impressive clients, Emphasise technical ability - Before and after shots of their work, Be mindful of aspect ratios, Say "No" to copyrighted music, Cut to the beat, Don't repeat footage, Quality control, Online all the time, DVDs for delivery, Label with contact info, Active and accessible, Show your personality, Ask a critic

MODULE 3

Discuss the importance of self promotion. Getting visibility - Youtube, Vimeo, Facebook, Blogs, Web page, Business cards, Job portals etc.

Reference

Interview: How to Master Interviews and Stand Out Among Your Peers: Stefan Anderson
Success in Interview:AnandGanguly

Website Reference

http://www.premiumbeat.com/blog/top-20-tips-for-creating-a-successful-demo-reel/
https://careerservices.princeton.edu/undergraduate-students/interviews-offers/preparing-interviews
http://www.kent.ac.uk/careers/cv/mediacv.htm
http://www.bbc.co.uk/academy/production/article/art20130702112136472