Al-Ameen College

Edathala, Aluva

BVoc Sound Engineering

NEW SYLLABUS

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30th June 2021

Syllabus Overview

Semester	Paper Name	Remarks
Semester 1	Listening & Speaking Skills in English (T)	(Common Paper)
	Fundamentals of Computer (T)	(old)
	Media History (T)	(re-structured)
	Science of Sound (T)	(re-structured)
	Audio Electronics (AOC)	(re-structured)
	Microphone Design & Application (AOC)	(re-structured)
Semester 2	Writing & Presentation Skills in English (T)	(Common Paper)
	Analog & Digital Audio (T)	(New)
	Introduction to Electronic Media (T)	(re-structured)
	Introduction to Music Theory (AOC)	(re-structured)
	Audio Signal Processing (AOC)	(new)
	Internship 1	
Semester 3	Principles of Management	(Common Paper)
	Public Speaking (AOC)	(Old)
	Sampling & Synthesis (AOC)	(New)
	DAW Fundamentals (AOC)	(New)
	MIDI (AOC)	(re-structured)
	Live Sound Fundamentals (AOC)	(New)
Semester 4	Softskill & Personality Development (T)	(Common Paper)
	Media Management (T)	(old)
	Music Programming & Production (AOC)	(New)
	Radio Programme Production (AOC)	(re-structured)
	Film Appreciation (AOC)	(re-structured)
	Internship 2	
Semester 5	Environmental Studies (T)	(Common Paper)
	Media Ethics & Education (T)	(re-structured)
	Screen Writing & Storyboard (AOC)	(Old)
	Art & Technology of Mixing & Mastering (AOC)	(New)
	Multitrack Audio Production (AOC)	(New)
	Studio Acoustics & Design (AOC)	(re-structured)
Semester 6	Entrepreneurship Development (T)	(Common Paper)
	New Media (T)	(New)
	Dubbing & Sync Sound	(re-structured)
	Surround Sound Production and Mixing	(New)
	Introduction to Video Production and Editing	(New)
	Internship 3	

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Semester 1

1.1 LISTENING & SPEAKING SKILLS IN ENGLISH (T)

OBJECTIVES:

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

MODULE – I

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

Sample activities:

1. *Practice reading aloud. Use a variety of texts including short stories, advertisement matter, brochures, etc*
2. *Read out a passage and ask the students to identify the stressed and unstressed syllables.*

MODULE – II

Basic Grammar: Articles - Nouns and prepositions - Subject-verb agreement - Phrasal verbs - Modals - Tenses - Conditionals - Prefixes and suffixes - Prepositions -Adverbs - Relative pronouns - Passives - Conjunctions - Embedded questions - Punctuation -Abbreviations-concord- collocations-phrasal verbs- idiomatic phrases

Sample activities:

1. *Ask students to write a story/report/brochure, paying attention to the grammar.*

MODULE - III

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

Sample activities:

1. *Information gap activities (e.g. listen to a song and fill in the blanks in the lyrics given on a sheet)*
2. *Listen to BBC news/ a play (without visuals) and ask the students to report what they heard.*

MODULE - IV

Speaking: Fluency and pace of delivery – Art of small talk – Participating in conversations – Making a short formal speech – Describing people, place, events and things – Group discussion skills, interview skills and telephone skills

Sample activities:

1. *Conduct group discussion on issues on contemporary relevance.*
2. *Ask students to go around the campus and talk to people in the canteen, labs, other departments etc. and make new acquaintances.*
3. *Conduct mock interviews in class.*
4. *Record real telephone conversations between students and ask them to listen to the recordings and make the corrections, if any are required.*

MODULE - V

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

Books for Reference:

1. *V.Sasikumar, P KiranmaiDutt and GeethaRajeevan, .Communication Skills in English.Cambridge University Press and Mahatma Gandhi University.*
2. *Marilyn Anderson, Pramod K Nayar and Madhucchandra Sen. Critical Thinking, Academic Writing and Presentation Skills. Pearson Education and Mahatma Gandhi University.*

For Further Activities

1. *A Course in Listening and Speaking I & II, Sasikumar, V.,KiranmaiDutt and Geetha Rajeevan, New Delhi: CUP, 2007*
2. *Study Listening: A Course in Listening to Lectures and Note-taking Tony Lynch New Delhi: CUP,2007.Study Speaking: A Course in Spoken English for Academic Purposes. Anderson, Kenneth, Joan New Delhi: OUP, 2008*

1.2 - FUNDAMENTALS OF COMPUTER (T)

OBJECTIVES: To know about the computer network, operating system and create their own websites.

MODULE – I

Introduction to computers: Computer - Definition - Characteristics of Computers - Basic Applications of Computer - Generations of computers - Concepts of Hardware and Software - Data processing - Concepts of data processing - Definition of Information and Data - Basic data types - Storage of data/Information as files, Representation of data/Information.

MODULE – II

Functional Units of Computer Components of Computer System: Central Processing Unit (CPU) - input/output Devices - Computer - Memory - Primary and secondary memory - Magnetic and optical storage devices - Hard Disk - Components.

MODULE – III

Computer Networks: Introduction - Uses - Types of network - Network Topologies - FTP - Transmission Media - Magnetic media, Twisted pair media, Base band and Broad band - Fiber optic Cable. Internet - History - Basic requirements - Hardware - Software - Web browser - Internet explorer - Netscape Navigator - Feature - Email - Outlook Express - www.

MODULE – IV

HTML: Overview, Heading - Tags - HTML - Attributes, HTML - Formatting, HTML - Meta-Tags - HTML - Comments - HTML - Images - HTML Tables - HTML - Lists - HTML Links -HTML Forms - Creating WEB pages.

MODULE – V

Operating Systems: MS Windows 2000 - Introduction to window - Start menu Folder - Documents - Desktop - Toolbar. Mac OS - Introduction, Basic Functions, Operations.

REFERENCE

Antony Thomas. Information Technology for Office. Pratibha Publications, Gini Courter & Annette Marquis. Ms-Office 2007: BPB Publication

1.3 - MEDIA HISTORY (T)

OBJECTIVES: Familiarizing the historical background of TV, radio and other medias.

MODULE – I
Introduction to Broadcast Journalism: Radio as a Mass Medium - Origin, Development and Future of Radio - Advantages and disadvantages of Radio Broadcast - Radio in India: All India Radio services, the regional services and the local services. Radio commercials, FM Broadcasting: Digital Audio Broadcasting

MODULE - II
Definitions of Advertising: History of advertising - Advertising in the US - growth of advertising in India. What is PR - Definitions of PR, History of PR. PR in olden times and growth of PR. PR in India.

MODULE - III
Introduction to Visual Media: History of TV, TV in India - TV for information, TV for entertainment - Prasar Bharati Act - The Broadcasting Bill - Ethics of telecasting.

MODULE – IV
History of cinema, Understanding Cinema Early Film History: Silent era to the birth of the Talkies, The pioneers Lumiere Brothers, Realism and Soviet films - Evalution of film language - Milestones in Indian Cinema, Dadasaheb Phalke, Sathyajith Ray - Films of the new wave - The middile cinema the second wave - Grammar of films: Shot, Scene, Sequence. Types of films: feature films, animated films, documentary films, children's films, educational films, parallel cinema. NFDC - Film censorship

MODULE – V
Cyber Journalism: Introduction to Cyber Journalism - Fundamentals of Cyber Media, Advantages & Disadvantages of Cyber Journalism. Blogging.

REFERENCE

Media Studies: Media history, media and society: Pieter J Fourie

1.4 - SCIENCE OF SOUND (T)

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

MODULE – I – Wave Nature and Characteristics
What is sound? Wave theory – Sine wave, Transverse and Longitudinal wave, Sound as a pressure wave, Propagation of sound wave through medium, Waveform characteristics – Amplitude, Frequency, Wavelength, Time-period, Velocity, Phase;

Sound and density, Physical characteristics of sound – reflection, absorption, refraction diffraction, diffusion;

Simple and complex wave, Fundamental frequency, Harmonics and Overtones, Partials, Octave, Timbre; Different waveform types – Sine, Square, Triangle, Saw-tooth; Sound Envelope – ADSR;

MODULE – II – Audio Measurements
Peak and RMS, Linear and Logarithmic scale explained, Decibel – What is decibel? Sound pressure level, Sound pressure to dB scale, Decibel equations, Inverse-square law;

SPL measurements, Threshold of hearing, Threshold of pain, Weighing Networks, Metering – VU & PPM, dBm, dBu, dBA, dBV, dBFS, standard levels for interconnecting audio equipments

Dynamic Range, S/N Ratio, Headroom, Pink and White Noise

MODULE – III – Human Ear
Human ear – Structure of ear – outer, middle and inner ear; Perception of pitch, critical bands, Dynamic Range of Hearing, Equal Loudness Contour and Flecter-Munson curve, Protective mechanism of Ear

MODULE – IV – Psychoacoustics
Correlated and Uncorrelated sounds, Binaural Localization, Haas Effect, Concept of Masking, Beats, Doppler Effect, Cocktail Party Effect

MODULE – V – Sound in an enclosed space
Direct & Indirect sound, Free and Reverberant field, Resonance, Standing Waves, Room modes – Axial, Tangential, Oblique; Comb filtering.

Early Reflection, Reverberation, RT60, Absorption coefficient of materials, Sabine equation, RT60 Calculations, Reverb vs Echo, General acoustic characteristics of a studio room

REFERENCE

Acoustics and Psychoacoustics - Howard Davis M, James Angus;
Modern Recording Techniques – David Miles Huber;
Sound and Recording – Francis Rumsey

1.5 - AUDIO ELECTRONICS (AOC)

OBJECTIVE: To familiarize with electronic components and connectors used in audio

MODULE I
Atomic Structure – Electron, Proton, Neutron; Atom Model, Free Electrons

Basic Electronics – Conductor, Insulator, Semiconductor, Current, Voltage, Batteries, Resistance, Ohms Law, Power, Series and Parallel Connections

Electricity and Magnetism, Faraday's Law, Electromagnetic Induction, Mutual Induction

AC current, DC current

MODULE II
Active & Passive Components

Resistor – Introduction, Basic Principles, Resistance of a resistor, Resistor colour codes, Series and Parallel connection, Variable Resistor

Capacitor – Introduction, Basic Principles, capacitance, types of cap's, series and parallel connection

Inductor – Introduction, Inductance measurement, Coils

Transformers – Basics, Step-up, Step-down

Vacuum Tubes – Basics

Semiconductors – Introduction, p-type and n-type, Diodes – basics, biasing, diode rectifier; LED's, Transistors – Transistor Types, functions; IC's, Op-Amp's

Interpreting circuit diagrams – Basics, Common symbols

MODULE III
Transmission techniques - Cable and its characteristics - Balanced & Unbalanced Transmission, DI Box, Impedance, Frequency response

General Audio Cable types - Twisted pair cable, snake cable, shielded cable, Mono/Stereo cable, co-axial cables, XLR male cable XLR Female cable, XLR Board connector, TRS male cable, RCA male, RCA female, RCA Cable, DIN cable, USB cable, DB25, BNC, LAN Cable, Concept of OFC and its applications – ADAT cable

MODULE IV
Soldering – Basics, necessary components – Soldering Iron, Solder lead, Flux, Solder sucker, Soldering Tips & Techniques

How to solder – XLR Cable, TRS Cable, TS Cable (Projects)

Multimeter – Basics, Uses, Controls, Setting up the multimeter, taking voltage, current, resistance measurements, testing various components, testing wires and cables for continuity

1.6 - MICROPHONE DESIGN & APPLICATION (AOC)

OBJECTIVES: Understanding various types of microphones and their uses. Getting a thorough knowledge about various patterns of a microphone and their advantages.

MODULE I
Microphone Design- Transducer, Types of mic – Dynamic, Ribbon, Condenser, Electret, Shortgun; Design and working of Mics – Dynamic, Condenser, Ribbon, Electret, Shortgun.

MODULE II
Microphone characteristics- Directional response - Polar Pattern, Frequency response - Transient Response - Output characteristics

Demo of various polar patterns

MODULE III
Microphone preamps – Introduction, Preamp Types – Tube, Transformer, Discrete; Channel Strips, Microphone Techniques – Mono Miking Techniques, Stereo Miking Techniques – XY, AB, MS Pair, ORTF, Binaural, Blumline, Decca Tree.

Proximity effect, Popping, Off axis pickup, Close microphone placement, Distand microphone placement, Room Mics

Surround Microphone Setup, Ambisonic Mics

MODULE IV
Microphone placement techniques – Vocal Mic Placement, Drum Miking,

Guitar - Acoustic guitar - Stereo Miking Techniques, Other instruments;

Percussions - Tabla, Mridangam, Ghatam, Congos etc.

Miking a guitar cabinet, Re-Amping

Choral miking, Strings session miking techniques

Miking and recording instruments outside studio

MODULE V
Microphone Selection - various brands of microphone, their uniquenes; Shure, Telefunken, AKG, Neumann, Rode, Warm Audio and other brands, USB Microphones.

REFERENCE:

1. Modern Recording Techniques: David Miles Huber
2. Handbook of Sound Engineers: Ballou Glen
3. Sound Recording Practice : Borwick John

Semester 2

2.1 - WRITING & PRESENTATION SKILLS IN ENGLISH (T)

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

MODULE – I

Letter Writing: Letters - letters to the editor - resume and covering letters - parts and layout of business letters - business enquiry letters offers, quotation - orders and execution - grievances and redressal - sales letters - follow-up letters - status enquiry - collection letters - preparation of power of attorney for partnership - job application letters - resume - CV - reference and recommendation letters - employment letters.

MODULE – II

Other types of Academic and Business Communication (written): Seminar papers - project reports - notices - filling application forms - minutes, agenda - reports - essays.

MODULE – III

Presentation Skills: Soft skills for academic presentations - effective communication skills – structuring the presentation - choosing appropriate medium – flip charts – OHP – Power Point presentation – clarity and brevity - interaction and persuasion.

*Compulsory activity: PowerPoint presentations to be conducted by each student in class

MODULE – IV

Non-verbal communication: Body language - Kinesics, Proxemics - Para language Channels - Barriers - Principles of effective communication.

MODULE V

Online writing and Netiquette: Writing e-mails- use of language – writing for blogs – social media etiquette- professional networking online (LinkedIn, E-factor etc.)

Compulsory activity: Each student should create a blog and/or profile in LinkedIn.

BOOKS FOR REFERENCE:

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

2. Antony Thomas,Business Communication and MIS, Pratibha Publications, Bhatia R.C.Business Communication

3. SaliniAgarwal Essential communication skill. Reddy P.N, and Apopannia, Essentials of Business communication.

4. Sharma R.C,KRISHNA Mohan, Business Communication and Report writing
Leod,M.C.,Management Information system

2.2 - ANALOG & DIGITAL AUDIO (T)

OBJECTIVES: This course is designed for practical understanding of Digital electronics, Analogue tape recorder and their functions.

MODULE I
Sound Recording and Reproduction – Phonographic, Flat Disk, Magnetic, Digital; Advantages and Disadvantages; Audio Recorders, Studio Recording.

MODULE II
Magnetic recording and its media- The professional ATR, the magnetic tape head, the tape transport, equalization, monitoring modes, Tape, Tape speed and Head configurations- print through, analogue tape noise, cleanliness, degaussing, C.L.A.S.P - functions and routing, tape emulation plugins.

MODULE III
Digital Electronics- The binary number system, Basic logic Gates and applications, Digital audio- The theory, Sampling, Nyquist theorem, Aliasing, Bit depth, Quantisation, Quantization Error, Dither, Sample rate Conversion - Analog to digital, Digital to Analog, PCM

MODULE IV
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, FLAC, MP3. Multitrack Digital Audio Recorders - DASH, R-DAT, ADAT.

MODULE V
Introduction to Digital consoles, Routing, Digital Audio Interfaces, Digital Audio Interconnection - SPDIF, AES/EBU, ADAT, TDIF, MADI, Network Audio, Synchronization – Word Clock, Jitter, Digital Time-code, Interconnecting Digital Audio Recording Systems, Digital Audio Level Meters.

REFERENCE:

Modern Recording Techniques: David Miles Huber,
Digital Electronics by Thomas Floyd,
An Introduction to Digital Audio: John Watkinson

2.3 - INTRODUCTION TO ELECTRONIC MEDIA (T)

OBJECTIVES: Basic introduction of electronic media, how they can be used in present generation. Getting an understanding about radio broadcasting, television industry and forms of broadcasting language.

MODULE I
Defining Electronic Media: Characteristics of Electronic Media, Types of Electronic Media, Scope and Limitations of Electronic Media.

MODULE II
Radio Broadcasting-Origin and Growth, All India Radio, FM Radio stations bands, Radio Jockeys Programs, Formats: News talks, Interviews, Documentaries and advertisements. Radio program productions-Studio, Recording, Editing, and Radio station Structure and staff.

MODULE III
An overview of Television Industry, TV as a domestic Medium, Popularity, Entertainment-Education format. Formats of TV News packaging, Programs- structure and format in the new era, live talk, Sitcoms and Soap Operas, Station structure and staff.

MODULE IV
Broadcast Language and Theories- Clarity & Simplicity, Gate keeping & Credibility, The local identity, Rewriting, Basic Style rules, Voice of the station, Attributions, Headlines, Writing to visuals.

MODULE V
Radio Journalism, Idea behind News, Preproduction & Script writing, The Production Processes & the news story, Camera movements, Satellite Transmission, The visual language.

REFERENCE

Electronic Media: An Introduction: Lynne Gross

Electronic Media: Then, Now, and Later: Barbara K. Kaye and Norman J. Medoff,

Broadcasting in the 21st Century: Richard Rudlin

2.4 - INTRODUCTION TO MUSIC THEORY (AOC)

OBJECTIVES: To understand the fundamental concepts of music and various instruments. Understanding music scores, rhythms, scales, intervals and melody writing and harmony.

MODULE I – Introduction to Music
Music, Introduction, Brief history of Western Classical Music, Classical Music Era – Baroque, Renaissance, Classical, Romantic, Modern; Famous classical music composers, Musical Styles – Duet, Quartet, Sonata, Symphony, Opera

Listening session – Familiarizing with Classical music tracks.

Popular Music Genres – Rock, Pop, Blues, Jazz, Hip-Hop, Progressive

MODULE II – Basics on Musical Instruments
Introduction to Classical Orchestra, Types of Orchestra, Orchestral setup.

Instrument Sections – Strings Section – Violin, Viola, Cello, Double Bass; Wind – Flutes, Oboe; Brass – Trumpet, Trombone, Tuba, Horns; Percussion;

MODULE III
Basics of Music Notation – Stave, Treble and Bass clef, Staff names – Treble Clef, Bass Clef; Middle C on a Piano, Half step, Whole Step, Accidentals;

Mapping Musical notes and Piano keys, Ranges of different musical instruments, Musical Note Values – Semibreve, Minim, Crotchet, Quaver, Semi-quaver, demi-semi-quaver; Dotted Notes; Triplets; Rest symbols, Bar-lines, Stop Lines. Other Musical Symbols.

Rhythms - Pulse, Meter; Time signatures;

Scales - Major Scales, Minor Scales, Chromatic Scales, Key Signatures, Relative Major/Minor Relationship; Modes; Intervals;

Triads – Major Chords, Minor Chords, Chords in each major/minor scale; Inversions and Chord Progressions;

Basics of harmony and arrangement – SATB structure.

MODULE – IV – Introduction to Indian Music Theory

Indian Music – Introduction, Carnatic vs Hindustani music, Concept of Sruthi, Swara, ragas, tala, Prominent Indian classical composers, Indian Musical Instruments, General notation system in Indian music

REFERENCE

Music Theory for Dummies;
Modern Recording Techniques: David Miles Huber

2.5 - AUDIO SIGNAL PROCESSING (AOC)

OBJECTIVE: To get an overview on audio signal processing in analog and digital domain, and tools and equipment for processing audio

MODULE I – AUDIO PROCESSING IN GENERAL
Serial and Parallel processing, Inserts and Sends, Y-cable and signal routing, Bus Processing, Mid-Side Processing, Hardware vs Software, Dynamics processing, Spectral Processing, Time-based Processing

Patchbays – What are they? Patchbay types

MODULE II – SPECTRAL PROCESSING
Filters – High-Pass, Low-Pass, Band-Pass, Band-Reject, Notch, Slope setting;

Equalizers – What is an EQ? Spectrum View in EQ's, Common EQ bands – low, low-mid, mid, high-mid, high; EQ Types – Shelving, Semi-Parametric, Fully Parametric, Graphic, EQ types in analog/digital mixers, General EQ tips & techniques for vocals and instruments, working of a dynamic EQ

Harmonic Saturation – What are Harmonics? Odd and Even Harmonics, Tape Saturation, Tube Saturation, analog saturation plugins, Clipping processors or Clippers

Distortion and Overdrive, guitar pedal effects

MODULE III – DYNAMICS PROCESSING
Compressors : Audio signal dynamics, Dynamic Range, Compression, Effects of compression on the signal;

Compressor – Features, Threshold, Ratio, Attack, Release, Gain, Use of Side-Chain, Knee control; Different compressor types – VCA, Opto, Vari-Mu, FET, Digital, Multi-band Compression.

Parallel Compression, Look-Ahead Compression, Ducking, De-Essing, general compressor guidelines, compressor plugins in the industry, analog emulation plugins

Expander: Uses, Parameters – Threshold, Ratio, Attack, Release

Limiters: Difference between compression & limiting, Parameters – threshold, ceiling, attack, release, True-Peak Limiters

Noise Reduction: What is noise? Using a noise gate, Gate settings, Difference between noise gate and noise reduction, De-noise plugins, Role of spectral view in noise reduction software, Spectral noise-removal tools.

MODULE IV – TIME-BASED EFFECTS
Reverb: The physics behind reverberation – Direct signal, early reflection, reverberation; Early days of reverb – reverb chambers, spring reverb, plate reverb; Digital Reverb, Common reverb types (hall, room, plate, gated, reverse etc.), Reverb plugins, Impulse Response Reverb, General reverb routing setup – FX Bus, popular reverb processors

General reverb parameters – pre-delay, early reflection, reverberation time, dry/wet control, feedback

Delay: Basic Delay FX, Feedback, delay types – mono, stereo, slap-back, multi-tap, ping-pong, tape; delay time calculation, time sync to tempo.

Chorus: Working of chorus effect, Common parameters – time, width, LFO, Speed, number of voices

Flanger: Working of flanger, common parameters

Phaser: Working of phaser, common parameters

MODULE V – PROCESSING IN DAW

Insert vs send, Effect bus routing, Inserting a plugin on a track, importance of signal chain, bus processing, wet vs dry controls, routing for parallel processing, master-bus processing

REFERENCE

Modern Recording Techniques – David Miles Huber

Handbook for Sound Engineers

Mixing Engineer's Handbook – Bobby Owsinski

Sound and Recording, 6th Edition - (Francis Rumsey and Tim McCormick)

2.6 - INTERNSHIP 1

Internship for students at a studio where music productions are handled, so as to gain a well off knowledge about music and its production side.

Semester 3

3.1 - PRINCIPLES OF MANAGEMENT (T)

OBJECTIVE: This course is a basic introductory and foundational management course. It is designed for students who desire to equip themselves with key knowledge, skills, and competencies in various aspects of management. The course encompasses the core components of management including planning, organizing, leading and controlling the organizations.

MODULE – I

Nature and Process of Management: Schools of Management Thought – Management Process School, Human Behavioural School, Decision Theory School, Systems Management School, Contingency School – Managerial Role – Basics of Global Management.

MODULE – II

Planning: Objectives – Types of plans - single use plan and repeated plan – MBO, MBE – strategic planning and formulation. Decision making - types and process of decision making – forecasting.

MODULE – III

Organising: Types of organisation - formal and informal, line and staff, functional – organisation structure and design – span of control, delegation and decentralisation of authority and responsibility – organisational culture and group dynamics.

MODULE – IV

Staffing: Recruitment, Selection, Induction, Training, Maintenance and retrenchment Systems approach to HRM – Performance appraisal and career strategy – HRD - meaning and concept.

MODULE – V

Directing: Motivation - meaning - need for motivation. Theories of motivation - Herzberg and McGregor. Leadership - importance – styles of leadership, Managerial Grid by Blake and Mounton, Leadership as a Continuum by Tannenbaum and Schmidt, Path Goal Approach by Robert House (in brief) Controlling - Concept, Significance, Methods of establishing control.

BOOKS FOR REFERENCE:

1. Moshal.B.S .Principles of Management, Ane Books India,NewDelhi.

2. Bhatia R.C. Business Organization and Management, Ane Books Pvt. Ltd.,NewDelhi

3. Richard Pettinger. Introduction to Management , Palgrave Macmillan, NewYork.

4. Koontz and O'Donnel. Principles of Management ,Tata McGraw-Hill Publishing Co.Ltd. NewDelhi.

5. Terry G.R. Principles of Management, D.B.Taraporevala Sons &Co.Pvt.Ltd.,Mumbai.

6. Govindarajan.M and Natarajan S. Principles of Management, PHI, NewDelhi.

7. MeenakshiGupta .Principles of Management, PHI, NewDelhi.

3.2 - PUBLIC SPEAKING (AOC)

OBJECTIVES: Developing public speaking skills, understanding various ways to improve public speaking.

MODULE I
Introduction to public speaking- The benefits of public speaking, communication processes, ethical speaking and categories of speeches, Analyzing your audience- Adapting to audiences, evaluation techniques and listener needs.

MODULE II
Listening and Feedback- Improving listening and note-taking skills, the four stages of listening and the different types of listening, General and specific purpose speeches, developing a thesis and timed speeches.

MODULE III
Researching the Speech- Research strategies and types, source reliability and supporting materials, Organizational patterns for informative and persuasive speeches, main ideas and supporting ideas.

MODULE IV
Language and Style- Inclusive and vivid language, diction and speaking styles, Four categories of speech delivery, nonverbal communication, pronunciation and speech rehearsal.

MODULE V
Types of Speeches- Informative, persuasive and special occasion speeches, Informative, persuasive and special occasion speeches.

REFERENCE:

Public Speaking Handbook: Steeven. A Beebe,

The Art of Public Speaking: Dale Carnegie

3.3 - SAMPLING & SYNTHESIS (AOC)

OBJECTIVE: To get an overview about music synthesizers and samplers and how they are made

MODULE I – Introduction to Synth
What is a synthesizer? A brief history of Synthesizers – Birth of Analog & Digital Synth

Introduction to Analog & Digital Synth types – Subtractive, Additive, Wavetable, FM, Sample Replay, Physical Modelling; Software Synthesis; Synthesizer uses in music.

MODULE II – Analog and Digital Synthesizers
What is an analog synthesizer? Fourier Analysis and Waveforms, Basic Waveforms – Sine, Square, Triangle, Sawooth;

Synthesizer Principles – Amplitude, Pitch & Frequency, Timbre, Loudness, Envelope-shaping;

Types of Synth – Modular, Analog, Digital, Sample-playback, Software Synth; Monophonic & Polyphonic Synth.

Making Sounds in Synth – Oscillator, Amplifier, Mixer, Filters;

Synthesizer general components - VCO Basics, VCF Basics, Envelope Generator (EG), VCA, LFO, Wave shaper;

Synthesizer methods – Subtractive Synth, Additive Synth, AM, FM, Ring Modulation, Physical Modelling, Granular Synthesis, Wave-shaping, Wavetable, Combinations of different systems. Drum Synthesizers

Popular Synth models, Digital Software Synthesizer plug-ins, Analog Synth Emulations.

MODULE III – Sampling
Introduction, Synth vs. Sampler, Sampling basics, sample rate and bit depth, Sampling techniques – looping, envelope generation; one shot samples, sample editing and processing, pitch shifting, multi-samples, drum sampling, sample libraries.

MODULE IV – Create your own synth patch (Project)
Using a synth VSTi, Basic routing, Waveforms available in the VSTi, AMP section, LFO section.

Create your own patch – lead, pads, bell-type etc.

MODULE V – Creating a sample library (Project)
Drum sampling – Recording one shots, velocity layers, editing, assigning to a sampler, tweaking;

Instrument sampling – Recording instrument performances and notes, key-mapping, velocity layers, envelope shaping, pitch shift, looping.

REFERENCE

Sound Synthesis & Sampling – *Martin Russ*; Analog Synthesizers – *Mark Jenkins*

3.4 - DAW FUNDAMENTALS (AOC)

MODULE I
DAW - General concepts - Recording, editing, mixing & mastering

Digital File Formats, Non-linear workflow, events & clips features, Track Types,

Setting up Audio Interface, signal flow paths, common DAW's in the Industry - ProTools, Cubase, Logic, Studio One, Abelton, Hardware vs Software Monitoring, Plugins, Plugin formats

MODULE II – Avid ProTools
Introduction, Features of and Specifications of ProTools, ProTools Versions and Types, ProTools Audio Cards/Acceleration Cards, iLock License, Familiarizing with ProTools DAW interface, Edit & Mix Windows, Transport Controls, Toolbars and functions etc, track types, Keyboard Shortcuts, ProTools Menus, Setting up audio interface for ProTools, I/O Settings, Hardware configurations, Buffer Size Settings, Delay Compensation

Create a New Session, Session Parameters - setting up sample rate/bit depth, file formats available, Setting up Project file Locations, Setting up tempo and other information, Saving a session. Adding Tracks, Track Types, Create audio tracks, Naming the track, Routing, Setting up the I/O in a session, Track Arm & Record, various monitoring settings, track parameters settings,

Recording Modes - Normal, Punch, Destructive etc., Recording and Playback - Start a recording, punch mode, playback, edit & playback cursor, Window Scrolling

Editing - Editing Modes - Grid, Slip, Spot, Shuffle; Editing Tools - Selection, trim, zoom, smart tool, pencil tool etc, Grid / Ruler modes, Understanding Audio Regions, Working with Selection, Markers, Nudging, Fades/Cross-fades

Mixing - Mix Window, Inserts/Plugins, Plugin Types, Aux Tracks, Send/Return, Routing, Bus/Groups, Automation - Automation modes, Automation Track view, editing automation

MIDI in ProTools - MIDI Track, Instrument Track, Routing, Adding MIDI Devices to ProTools, MIDI Recording, MIDI Piano Roll and Editing in ProTools

Importing Media - Import audio, video; Working with Video,

Exporting - Audio Export, Consolidation, Create Stems etc

Saving - Bounce - Formats, file parameters, Save Session, Save copy etc.

MODULE III - Steinberg Cubase 10 Pro
Familiarizing with the interface, Features, Tools;

Setting up a new session in Cubase - Session Parameters, Project Location, ASIO Audio Device Configuration, Session File types, Plugin Formats, Installing plugins, plugin location configuration

Recording - Create tracks, track parameters, I/O configuration, Tempo and Grid settings, record audio in a track, Monitoring, Keyboard Shortcuts

Editing Tools - Toolbars, Selection, trim, fade, etc.

Mixing - Mix Window Familiarization, Plugin Types, Adding Insert Plugins, Sends, FX Track, Bus/Groups, Master Fader, Automation Modes

VSTi - Instrument Tracks, Adding VSTi, Configure MIDI Instrument in Cubase, Recording MIDI into a track, MIDI Manipulation, Piano Roll, Exporting audio from MIDI

Importing - Import Audio files, Working with Video - Importing Video files, Video Playback Window

Export - Bounce session - setting file parameters, Create Stems, Consolidation etc.

MODULE IV - Studio One
Familiarizing with the interface - Edit, Mix and Browser windows, drag n drop features, Setting up Audio Interface

Recording - Create track, i/o setup, arm and recording, Monitoring, Playback, Keyboard shortcuts; Mix window, insert plugins, Create Bus, groups; Exporting - Create stems, Final Export, file formats; Importing video, video window

MODULE V - Logic Pro X
Familiarizing with the interface - Edit, Mix and Browser windows, drag n drop features, Setting up Audio Interface

Recording - Create track, i/o setup, arm and recording, Monitoring, Playback, Keyboard shortcuts; Mix window, insert plugins, Create Bus, groups; Exporting - Create stems, Final Export, file formats; Importing video, video window

3.5 - MIDI (AOC)

OBJECTIVES: To understand what MIDI is and how they are used in various music productions. Their advantages, and various ways through which they can be used to get a creative output in a Music production.

MODULE I
The power of MIDI - MIDI production environments- What is MIDI - MIDI and the computer - connecting to the peripheral world, MIDI interface.

MODULE II
System interconnections - The MIDI cable - MIDI phantom power, Wireless MIDI - MIDI jacks - MIDI echo, Typical configurations - The daisy chain, the multiport network.

MODULE III
Exploring the spec - The MIDI message, MIDI channels, MIDI modes, Channel voice message, system messages.

MODULE IV
Electronic instruments - Instruments and system plugin in- keyboards - the synth, samplers - sample libraries and DIY sampling, The MIDI keyboard controller.

MODULE V
Basic introduction to sequencing Recording - setting a session tempo, changing tempo, click track - MIDI to audio - Audio to MIDI - documentation - editing.

REFERENCE

The MIDI Manual: David Miles Huber

Mad Skills: MIDI and Music Technology: Ryan Diduck

3.6 - LIVE SOUND FUNDAMENTALS (AOC)

MODULE I – Basics
Basics of sound, Understanding dB scales, Inverse-Square Law; SNR & Dynamic Range, Headroom.

Introduction to Live sound Equipments - Microphones - Dynamic, Condenser, microphones for various applications; Mixers – Analog vs Digital, Small and large format consoles; Outboard gears - EQ, Compressor/Limiter, Effects processors; Speakers; Cables; Basic Safety Measures.

Tech Rider – How to prepare tech rider

MODULE II – Connections
Basic connections – Power, connecting microphones, Instruments, Speakers, Cabling

Mono and Stereo, Series and Parallel Connection, Impedance matching of speakers and amps, Balanced and Unbalanced connection, DI Box

Analog mixer input and output connections, Signal Flow – Channel strip, Gain, Filters, EQ and different types, AUX, PAN, Faders, Pre-fader / Post Fader options, Metering – VU, Peak;

Inserts vs Send processing, Add external gear via Channel Insert, Groups, VCA, Group Master, Aux Master, Master Fader

Setting up a Mic/Instrument – Gain staging, Monitoring, Routing;

Drum Miking, Vocal Miking, Miking other instruments; Sound Check;

MODULE III – Amplifiers & Speakers
Types of Speakers – Active & Passive, Horn type and Cone type speaker, Sub-woofers, Line arrays, Monitor Speaker setup, 2/3 way systems, Crossovers, Setting Cross-over points.

Amplifier types – Preamp and Power-amp, Amplifier Classes, Amplifier Specifications.

Cables – Microphone, Instrument, Speaker, Y-cable, Other cables used

PA Tuning - Room/Speaker Calibration, Calibration Tools, Softwares, Speaker Delay.

MODULE IV – DIGITAL CONSOLES
Introduction, Analog vs Digital, Advantages of Digital consoles, general features, input and output connections;

Digital console basics – Patching, Signal Flow, EQ, Dynamics, FX, Mix Out's;

Connecting mics and instruments, grouping, DCA, saving and loading presets;

Interfacing with a PC, using plugins, multi-track recording using digital mixer, virtual sound checks.

REFERENCE

Live Sound Fundamentals – *Bill Evans*; Introduction to Live Sound Reinforcement – *Teddy Boyce;* Yamaha Sound Reinforcement Handbook

Semester 4

4.1 - SOFT SKILLS & PERSONALITY DEVELOPMENT (T)

Objective: The course aims to cause a basic awareness about the significance of soft skills in professional and inter-personal communications and facilitate an all-round development of personality.

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

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

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

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

MODULE – V
Professional skills: Organizational skills- team work- business and technical correspondence- job oriented skills-professional etiquettes.

REFERENCE:

1. Matila Treece: Successful communication: Allyun and Bacon Pubharkat.

2. Jon Lisa, Interatid skills in Tourist Travel Industry, Longman Group Ltd.

3. Robert T. Reilly, Effective communication in tourist travel Industry Dilnas Publication.

4. Boves. Thill Business Communication Today Mcycans Hills Publication.

5. Dark Studying International Communication Sage Publication.

6. Murphy Hidderandt Thomas Effective Business Communication McGraw Hill.

4.2 - MEDIA MANAGEMENT (T)

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 : Durgadas Basu,

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

4.3 - MUSIC PROGRAMMING & PRODUCTION (AOC)

MODULE I

Music Programming – Introduction, Connecting devices, DAW features, Virtual Instruments, Sample Libraries, Loops, Sound Banks.

MODULE II

Pre-production, Organizing the song structure, Deciding the time signature, tempo and pitch of the track, Music Arrangement basics, Writing down chords and score

Setting up a session for programming, Connecting MIDI devices to a system, MIDI Configuration settings, Metronome settings, Virtual instruments – What are they? Various virtual instrument plugin formats – VST/AU/AAX; Multichannel VSTi's.

MODULE III

Recording MIDI – Piano roll, piano roll layout, Piano roll vs drum roll, MIDI Notes, Note length.

MIDI Overdub vs MIDI Merge, Punch In Punch Out, Pre/Post roll settings, Step Recording, Groove Programming and looping, MIDI Track delay, correcting latency issues.

Key switching Techniques, MIDI CC expression mapping and programming,

MODULE IV

MIDI Editing – Editing/correcting notes, Copy & Paste, Split, Trim, Note Length adjustments – legato, staccato; Note overlap correction, Double-note correction, Velocity Adjustments, MIDI Expression editing, Note Transpose, Pitch/Octave shift.

Quantization – Introduction, quantizing notes, choosing quantization values, Input Quantize, Humanize setting, Swing setting

MIDI vs Audio, Converting MIDI to audio, Exporting as audio clips, Stem Export, Track Freeze, Consolidating & making the session ready for mix, Basics of packaging a session for transfer.

MODULE V

Importing Stems for mixing, Organizing the track layout, Audio Mixing, Exporting to Final Audio Mixdown.

REFERENCE

Music Production – Hans Weekhout

MIDI Manual – David Miles Huber

4.4 - RADIO PROGRAMME PRODUCTION (AOC)

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. Training in Anchoring, Television Programs including Reality Shows. Studio training in News Reading. Training in co-ordinating Talk Shows and News Programs. Training in conducting interviews.

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, 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. Key Elements of Radio Writing -Radio Drama /Plays, Approaches to writing radio drama, Features, Radio Commercials/Jingles - Documentaries Feature. Voice Modulations, How to voice radio script?. Paint the Picture, Human voice as an instrument, Think Audience , voice quality ,Radio scripting as an art, writing for the ear.

REFERENCE

RADIO PRODUCTION HANDBOOK - A Beginner's Guide to Broadcasting and Cablecasting: *Arthur C. Matthews*

4.5 - FILM APPRECIATION (AOC)

OBJECTIVES: Understanding the fundamentals of a movie, their types and various genres of movies. Getting a better understanding of how they are made.

MODULE I
What is a Movie - Ways of Looking - Principles of Film form - Fundamentals of Film Form - Language of Cinema – Film Movements

MODULE II
Different Genres of films-Principles of Narrative Construction Classical Structure - Dialectical Form -Plot and Story, Cause and Effect-Mise-en-scene (technicalities)

MODULE III
Introduction to World Cinema- 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
Indian cinema Origin and development-theorectical Perspectives

REFERENCE:

1. Producing great sound of film and video : Jay Rose,

2. The filmmakers handbook: Steven Ascher, Edward Pincus,

3. The Art and science of Cinema-Anwar Huda

4.6 - INTERNSHIP 2

Internship for students at a studio where they would gain a well off knowledge about microphones, preamps recording techniques and studio acoustics, mixing and mastering of audio.

Semester 5
5.1 - ENVIRONMENTAL STUDIES (T)

OBJECTIVES: To build a pro-environmental attitude and a behavioral pattern in society based on sustainable lifestyles, To impart basic knowledge on pollution and environmental degradation.

MODULE I (15 hrs)
Introduction to Environment Science : Development and Environment, Human Population and the Environment : Population growth, variation among nations-Population explosion – Case Studies. Sustainable Development – Concept, Policies, Initiatives and Sustainability strategies, Human Development Index, Gandhian Principles on sustainability.

Natural systems - Earth - structure, soil formation - factors affecting, soil types, Atmosphere – structure and composition, Hydrosphere – Oceans, rivers, estuaries, Lakes etc., Physical environment of aquatic systems.

Resource utilization and its impacts on environment - Renewable and non-renewable resources,

Forest resources: Use and over-exploitation, Timber extraction, mining, dams and their effects on forest and associated biota.

Water resources: Use and over-utilization of surface and ground water, conflicts over water, River valley projects and their environmental significance - Case studies – Sardar Sarovar

Mineral resources: Use and exploitation, environmental impacts of extraction and use of mineral resources, case studies – sand mining, metal mining, coal mining etc.

Food resources: World food issues, changes caused by - overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, and salinity. Case studies.

Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies.

Land resources: Land as a resource, land degradation, soil erosion and desertification.

MODULE II (15 hrs) – 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.

Ecological interactions Types, characteristic features, structure and function of the following ecosystem: Forest, Grassland, Desert, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries). Significance of wetland ecosystem – Classification, Ecology and Biogeochemistry. Threats and Management

Biodiversity and its Conservation

Introduction – Definition : Genetic, species and ecosystem diversity, Biogeographical classification of India, Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values, Biodiversity at global, National and local levels, India as a mega - diversity nation Hot-spots of biodiversity, Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts., Endangered and endemic species of India, Conservation of biodiversity : In-situ and Ex-situ conservation of biodiversity. People's participation in biodiversity conservation - Biodiversity Register; Global Climate change and Biodiversity.

MODULE III (15 hrs) - Environmental Pollution

Air pollution: sources - mobile, stationary, fugitive; type of pollutants - primary and secondary air pollutants, Smog - classical smog and photochemical smog, Acid rain; Ozone depletion; impacts of air pollutants on environment; control measures.

Water pollution: Sources - Point and non-point sources; Types – chemical, biological and physical; impacts on the environment; water quality – water quality standards; control measures.

Soil pollution: sources and impacts

Noise pollution: sources, impacts on health, management strategies Thermal pollution and Nuclear pollution - sources and impacts Solid wastes – types, sources, impacts on Environment.

Municipal Solid Waste Management: Essential steps- source segregation, collection, Processing and Disposal of residues. Environmental Pollution - case studies

Natural and anthropogenic Disasters and their management: floods, earthquake, cyclone and landslides.

MODULE IV (15 hrs) - History of Environment Protection

Silent spring, Ramsar Convention, Stockholm conference, Montreal protocol, Kyoto protocol, earth summit, Rio+10, Rio+20, Brundtland commission Report, Sustainable development Environmental movements in India, Global initiatives for Environmental protection Environmental education –basics, Tblisi conference, Environment Management Systems Environment Information Systems, Environmental Impact assessment (EIA) – definition and significance, EIA notification; National and state level Authorities; role of public in EIA of a development project,

Social Issues and the Environment, Environmental movements

From Unsustainable to Sustainable development - Urban problems related to energy- Water conservation - Rain water harvesting; Watershed management

Environmental ethics: Issues and possible solutions.

Environmental Economics, Greenhouse effect and Climate Change, Natural and Anthropogenic disasters

Disaster Management, Wasteland reclamation - Consumerism and waste products- Environmental Laws – General introduction; Major laws in India. 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

TEXT BOOK

Textbook for Environmental Studies for Undergraduate Courses of all Branches of Higher Education – Erach Bharucha for University Grants Commission

Further activities

Field work Visit to a local area to document environmental assets: river / forest / grassland / hill / mountain

Visit to a local polluted site - Urban / Rural / Industrial / Agricultural / Solid waste dump yards

Study of common plants, insects, birds.

Study of simple ecosystems-pond, river, hill slopes, etc.

(Field work Equal to 5 lecture hours)

5.2 - MEDIA ETHICS & EDUCATION (T)

OBJECTIVE: To provide an awareness of various aspects of Indian Constitution and Press Laws; to highlight the importance of media ethics and laws and to sensitize students about norms of journalistic conduct.

MODULE I

Freedom of Speech and Expression, Article 19 of Indian Constitution – Fundamental rights- Directive principles of state policy-Center state relations – Emergency provisions- Amendment of the constitution - Freedom of media – Official secrets act – Contempt of the court

MODULE II

Print media act- Laws applicable to Mass Media - The Press and Registration of Books Act, 1867; The Copyright Act, The Press Council Act – 1978; - Registration of Newspapers- Broadcasting- Press Commissions- The Working Journalist's and other Newspaper Employees (Conditions of service) and Miscellaneous Provisions Act 1955.

MODULE III

Media law and women -Indecent representation of women (prohibition) Act – 1986- The salient features of the act – Indecent representation of women rules 1987 – Other Regulations to safeguard Women – Media Law and children – The children Act,1960 – The young Persons (Harmful publications)

MODULE IV

Broadcasting -The Prasar Bharati act 1990 – Salient features of the act – The cable television Networks (Regulation) Act 1995 – The cable television network rules, 1994 – Broadcasting services Regulation Bill, 2006

MODULE V

Introduction to Media Ethics - Ethics vs Laws – Ethics vs. priciples of journalism- Code for commercial Advertising over All India Radio – Code for commercial advertising on Dooradarshan – Broadcasting Ethics- Cybercrimes – Types of cybercrimes - -Information technology Act, 2000

REFERENCE

1. Media Law and ethics – M. Neelamalar
2. The Journalist's Handbook by M V Kamath, Vikas Publishing House Pvt. Ltd., 2002.
3. Press Laws of India.

5.3 - SCREEN WRITING & STORYBOARD (AOC)

OBJECTIVES: Understanding basics of short screen play, how to write a shooting script.

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.

REFERENCE

Screenwriting: Felim MacDermott

5.4 - ART & TECHNOLOGY OF MIXING & MASTERING (AOC)

MODULE I – Introduction
Mixing – Basic concepts, mixing approach – tall, deep and wide; Elements of a Mix – Balance, Frequency range, Panorama, Dimension, Dynamics, Interest; Mono vs Stereo;

Mixing Hardware Essentials – Studio monitor speakers, speaker placement, Sub-woofers; Room Acoustics, Headphones, commercial speakers, Analog Mixing Signal flow, ITB vs OTB, Mixing Controllers

Monitoring levels, Understanding Human Ear sensitivity, Ear fatigue, Importance of taking breaks, Serial vs Parallel processing

Analog Mixing Chain and Signal flow, Hybrid mixing chains

Listening sessions: Reference Tracks

MODULE II - Mix Preparation
Organizing and labelling tracks, Track colours, Markers, Strip Silence, Applying Fades and cross-fades;

Timing and Tuning Adjustments, Groove tools, Time stretching techniques, Autotune, Pitch correction using Melodyne

Routing – Creating bus, Aux tracks, FX tracks, VCA's

MODULE III – Balancing
Gain staging, Fader balancing, Metering basics – VU, PPM, RMS; Panning and placement, Importance of mono and mono compatibility, correlation meter, checking the phase;

Applying Compression, Compressor settings, Different compression styles, Parallel compression; Transient Shaping; Using Multiband Compression, De-essers, Noise gates – Uses; Noise Reduction tools;

Side Chains explained, Ducking,

EQ and Filters – Effects of masking, Applying Filters, Clear the clutter, Types of EQ, Good EQ habits/techniques; Dynamic EQ's

Spectral Enhancements – Distortion, Harmonic Exciters, Saturation – Tube, Tape, other flavours;

MODULE IV – FX
Reverb – Choosing reverb, Insert vs Send, Routing settings, Types of reverb, Convolution plugins, Impulse Response; Gated Reverb;

Delay – Types, main controls, Doubler effects;

Stereo widening – Spacial processors;

Using Analog Processors in a DAW – routing setup, delay compensation, creating recall sheets.

Automation – Need for automation, automation modes, VCA Automation, plugin automation tricks

MODULE V – Mastering

Need for mastering, Working with 2-track master, Stem Mastering, Creating Fade-in's Fade out's, EQ, Loudness standards, Loudness matching, Final Mixdown formats, Mastering for streaming services

REFERENCE

Mixing Engineer's Handbook – Bobby Owsinski

The Systematic Mixing Guide – Ermin Hamidovic

Mike Senior – Mixing Secrets of the Small Studio

5.5 – MULTI-TRACK AUDIO PRODUCTION (AOC)

OBJECTIVE: To record, mix and master a song, having multiple recorded instruments, vocals, electronic samples and other elements.

MODULE I
Pre-production: Deciding the song, Create a log sheet with number of instruments and parts to be recorded, writing down necessary details for recording, making music score and notes etc, Deciding the artists.

MODULE II
Setting up mics for recording, deciding mono/stereo mic techniques, choosing appropriate microphones, setting up DAW for recording, headphone mixes, monitoring, setting levels for recording, recording the audio without errors, recording vocals and instruments.

MODULE III
Preparing for Mixing, Arrange the session, create groups and busses, editing, fader balancing, adding plugins, automation.

MODULE IV
Finalizing the mix, setting loudness levels, basic mastering, mixdown to appropriate format.

MODULE V – Project
Creating a stereo recording using live and electronic instruments, and mix and master the session in stereo format

5.6 - STUDIO ACOUSTICS & DESIGN (AOC)

OBJECTIVE: Learning how to design a studio and do its acoustics accordingly. Difference between acoustics and soundproofing. How to check the reverb time within a room and correct it.

MODULE I
Studio types - The professional recording studio, The project studio, home studio. What are the advantages and disadvantages of each of them? What makes one stand out from the other.

MODULE II
Difference between soundproofing and acoustics. What all materials are used for acoustics and what all materials are used for soundproofing.

MODULE III
Primary factors governing studio and control room acoustics- acoustic isolation, symmetry in control room design etc.

MODULE IV
Room reflections and acoustic reverberation - acoustic chambers. Diffusers, bass traps and what are each of these used for.

MODULE V
Measuring a room- measurement mic, softwares to measure a room, how to measure a symmetrical room, how to measure an asymmetrical room.

REFERENCE:

Modern Recording Techniques: David Miles Huber,

Handbook of Sound Studio Construction-Rooms for Recording and Listening: Ken C. Pohlmann

Master Handbook of Acoustics – Alton Everest

Semester 6

6.1 - ENTREPRENEURSHIP DEVELOPMENT (T)

Objective: To familiarize the students with the concept and overview of entrepreneurship with a view to enhance entrepreneurial talent. To impart knowledge on the basics of entrepreneurial skills and competencies to provide the participants with necessary inputs for creation of new ventures. To explore new vistas of entrepreneurship in 21st century environment to generate innovative business ideas.

MODULE I

To make the students understand about entrepreneurs and different classifications. Entrepreneur and entrepreneurship - Definition; traits and features; classification; Entrepreneurs; Women entrepreneurs; Role of entrepreneurs in India.

MODULE II

Create an awareness about EDP. Entrepreneurial development programme concept; Need for training; phases of EDP; curriculum & contents of Training Programme; Support systems, Target Groups; Institutions conducting EDPs in India and Kerala.

MODULE III

General awareness about identification of project financing new enterprises. Promotion of a venture; opportunity Analysis Project identification and selection; External environmental analysis economic, social, technological an competitive factors; Legal requirements for establishment of a new unit; loans; Overrun finance; Bridge finance; Venture capital; Providing finance in Approaching financing institutions for loans.

MODULE IV

To identify different opportunities in small business. Small business Enterprise - Identifying the Business opportunity in various sectors - formalities for setting up of a small business enterprise - Institutions supporting small business enterprise - EDII (Entrepreneurship Development Institute of India), SIDO (Small Industries Development Organization NSIC (National small Industries Corporation Ltd.) NIESBUD (National Institute for Entrepreneurship and Small Business Development) Sickness in small business enterprise causes and remedies

MODULE V

To understand about a project report relating to a small business. Project formulation - Meaning of a project report, significance, contents, formulation planning commissions guidelines for formulating a project report - specimen of a project report, problems of entrepreneurs, case studies of entrepreneurs.

Books for Reference:

1. Cliffton, Davis S. and Fylie, David E., Project Feasibility Analysis, John Wiley, New York,1977.

2. Desai A. N., Entrepreneur and Environment, Ashish, New Delhi,1990.

3. Drucker, Peter, Innovation and Entrepreileurship, Heinemann, London,1985

4. Jain Rajiv, Planning a Small Scale Industry: A guide to Entrepreneurs, S.S. Books, Delhi, 1984

6.2 - NEW MEDIA (T)

OBJECTIVES: To create awareness among students about the new emerging trends in information technology.

MODULE I
Internet: LAN, MAN, WAN, E-mail, Web, Ownership and administration of Internet, ISPs, WAP, types of Internet connections: Dial-up, ISDN, lease-line. Optical fibre: structure, advantage and application; protocols of Internet: SLIP, CSLIP, TCP/IP, PPP, WEB PAGE, Websites, Homepages.

Internet - features and advantage over traditional media; History and spread of internet in India, reach and problem of access; Internet and Knowledge Society; Convergence and Multi-media: Print, radio, TV, internet and mobile.

MODULE II
Basic knowledge of HTML and use of a content management system; Hyper-textuality, Multi-mediality and interactivity Use of various online tools to manage text, links, photos, maps, audio, video, etc. Status of online journalism today.

MODULE III
Cyber Journalism, New Social Media: Dynamics of social media networks, novelty, strength and weakness; Growing personal sphere and online communities; New business model: advertisements, marketing and online revenue; Future trends Podcast and Webcast.

MODULE IV
Open source journalism: Responding to the audience, Annotative reporting, Citizen Journalists, Problem of verification, accuracy and fairness, Use of blogs, tweets, etc. for story generation and development, Protecting copyright, Exploring Cyberspace:

MODULE V
Internet and Social Activism: Digital divide: Problem of access and other issues; Use of internet for development, Social sharing to social activism; National and international campaigns on environment, human rights and other issues.

REFERENCE

1. Nath, Shyam. Assessing the State of Web Journalism. Authors Press, New Delhi, 2002 2. Chakravarthy, Jagdish. Net, Media and the Mass Communication. Authors press, New Delhi, 2004
3. Bhargava, Gopal. Mass Media and Information Revolution. Isha Books, New Delhi, 2004.
4. Menon, Narayana. The Communication Revolution. National Book Trust.
5. Pavlik J.V. Media in the Digital Age. Columbia University Press.
6. Newspaper and magazine articles about New Media.

6.3 - DUBBING & SYNC SOUND

OBJECTIVES: Learning ways to dub, record Foley, do sync sound and mixing and balancing all the elements together. Getting a deep understanding of obtaining an audio apt for a video.

MODULE I
Dubbing - narration, commentary etc . Voice modulations. How to be expressive while dubbing.

MODULE II
Sync sound- Location Recorder, Location Microphone, Field mixer, Boom and Boom Operation, Sound Editing -Effects and Ambience recording/Track laying .

MODULE III
Foley Editing - Foley recording/Track laying . Proximity effect. Make it sound real.

MODULE IV
Pre Mix - Dialogue Premix, Effects Premix, Ambience Pre mix, Foley Premix, Music Premix.

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

REFERENCE

Handbook of sound Engineers : Ballou Glen,

Sound recording practice : Borwick John,

Sound Studio : Ford Tyree S.,

Sound FX : Alexander U. Case,

The Sound Effects Bible : RicViers

6.4 - SURROUND SOUND PRODUCTION AND MIXING

MODULE I
Introduction to multichannel surround sound, Mono vs Stereo vs Surround, History of Surround Sound, Surround Sound formats, Ambisonics, Commercial Surround Sound formats, Dolby, DTS and other formats, Home theatres

MODULE II
Stereo, Center Speaker Surround Speakers LFE / Sub-woofer, LCR system, Other Horizontal Layouts (6.1/7.1), Immersive Audio, Speaker placements in various formats, Time adjustments, Room acoustics for multi-channel audio, Speaker Calibration

Home Surround Sound Reproduction, Speaker & Device Setup

Object-based Audio: Channel-based vs. Object-based audio, Objects, Dolby Atmos, Beds

MODULE III - Surround sound recording techniques
XY, MS, Blumlein Pair, XY Recording,

BINAURAL: Perception, HRTF, HRTF individualization, Using Binaural

Microphones for Recording Ambisonics, First Order Ambisonics, Second Order Ambisonics, Higher Order Ambisonics, Software/Plugins for Ambisonics, Audio for AR, VR

MODULE IV
Setting up DAW for Surround Sound mix, I/O setup, Basic 5.1 setup in Protools, Speaker Setup and Calibration, Surround Panner, Panning modes.

Multichannel tracks and track outputs, multichannel plugins, Aux Sends, Multichannel Effects, Upmixing and downmixing,

MODULE V – Surround Mixing in Protools
Importing video, Preparing the session, create busses, multichannel setup, basic surround panning techniques, placing dialog and effects in the mix, automation, creating final mixdowns.

REFERENCE

Surround Sound -Up and Running *Tomlinson Holman*

Pro Tools Surround Sound Mixing – *Rich Tozzoli*

Ambisonics: A Practical 3D Audio Theory for Recording, Studio Production, Sound Reinforcement, and Virtual Reality by Franz Zotter/Matthias Frank

All Your Need to Know about 3D Audio by Nuno Fonseca, www.soundparticles.com

New Realities in Audio: A Practical Guide for VR, AR, MR and 360 Video by Stephan Schütze & Anna Irwin-Schütze

6.5 - INTRODUCTION TO VIDEO PRODUCTION AND EDITING

MODULE I

The camera – Different types of cameras, Rangefinder, TLR SLR, Different still film formats, Structure of a digital SLR-CCD/Cameras compression,Video Camera Operation - Familiarising with a video camera - Basic camera controls & settings - Exposure, White balance, Framing and focus - Video camera operation -Practical's.

MODULE II

The Shot-, Different Types of Shots, Basic Composition for video- Framing Human Subjects, The Rule of Thirds, Camera Angles, Two and three shot, OSS. Dynamic Shots- Camera Movements- Handheld - Pan and Tilt - Tripod, Dolly etc. Focus Effects- Lens Perspective and Characteristics.

MODULE III

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

MODULE IV

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 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.

6.6 - INTERNSHIP 3

Final internship for the students at a studio where all the required equipment and processes for a final film production is handled.