# M.Sc ELECTRONIC MEDIA

#### **SCOPE:**

In India, there is an increase in the number of Television channels both in the government and also in the private sector for which required technical personnel are to be educated with the right skills and background. The rapidly growing electronic media industry demands a large number of media professionals with a thorough training in the various media methods and state-of-the-art media technology. This course is designed to impart the information and knowledge of electronic media to those who aspire to be employed in TV, Radio, Video and Films in the area of multimedia applications.

The course aims to prepare the students to acquire skills and capacity to meet the demands of modern media. The curriculum lays stress on both theoretical and practical components. Every student undergoing the course is expected to complete one project in each semester (First semester- Documentary film, Second semester- animation movie, Third semester- Hypermedia Econtent and Fourth semester- a short film).

#### **Structure:**

This two-year masters degree course is designed to adopt semester system with choice based credit system with ample scope for showing their creativity and talent in developing media output.

**Eligibility for admission**: A minimum of 55 % marks in aggregate (Relaxation for SC/STs) as per university norms) in a three year Bachelor Degree in Science /Engineering / Agriculture/Medicine/ Visual Arts/ Performing Arts/ Journalism/ Business Management/ Statistics/ Visual Communication/Mass Communication/Electronic Media as one of the subjects or any Master degree with 55% marks in aggregate.

OR

Any graduate 55 % marks in aggregate with one year Diploma in Computer Applications.

Regulations: All the existing regulations governing the M.Sc degree courses in Science of the University are applicable to this course. Medium, Instruction & Examination are in English.

## **Infrastructure**

UGC's Curriculum Development Committee in Mass Communication recommends that a university should provide the following minimum infrastructure to the department for imparting a comprehensive teaching/training at the master's level in Mass Communication. As per the recommendation, we are fully equipped with:

- Computer laboratory with internet connectivity;
- A well-equipped electronic media laboratory for imparting comprehensive production skills and techniques;
- Modern photo-laboratory;
- A well-equipped audio-studio; and
- Laboratory journal (print media) production facility.

## Technical staff for the laboratories

In addition to access to information technologies and other technical equipment, the existing UGC prescribed staff norms for running a post-graduate Electronic media department should be followed. In addition to the above facilities, technical personnel must be recruited so that the infrastructure is well maintained and facilitated for learning. Our technical personnel with the minimum qualification of COPA (Computer operating programme assistant) assist in the process of training:

- Technical Officer one
- Assistant Technical Officer one
- Technical Assistant one

# Library

UGC's Curriculum Development Committee in Electronic media recommends that a department should have a well-stocked library with latest books and journals on all areas of Mass Communication. The department shall subscribe to all local, English and language newspapers and periodicals, including important regional, national, international newspapers and magazines. The department has a library with a collection of essential reference books, newspapers and periodicals.

## **Placement Service**

The Committee further recommends that a Electronic media Department should maintain close links with local and regional media institutions/organizations for providing effective training and placement facilities for the benefit of students. The department assists in identifying placements for the students.

# COURSE STRUCTURE (SCHEME OF THE PROGRAMME)

Paper Code	Paper	Subject	Credits	
I Semester				
ELEM 411	Theory	Visual Media & Communication	3	Н
ELEM 412	Theory	Digital Media & Instrumentation	3	Н
ELEM 413	Theory	Script writing for Electronic Media	3	Н
ELEM 414	Theory	Light & Colour	3	S
ELEM 415	Practical	Photography	2	Н
ELEM 416	Practical	Graphics	2	Н
ELEM 417	Practical	Editing Digital Audio	2	Н
ELEM 418	Practical	Project -1	2	Н
II Semester				
ELEM 421	Theory	Videography	3	Н
ELEM 422	Theory	Computer Animation (2D&3D)	3	Н
ELEM 423	Theory	Media Research	3	Н
ELEM 424	Theory	Web Technologies	3	S
ELEM 425	Theory	Advertising Media & Case studies	3	S
ELEM 426	Practical	Editing Digital Video	2	Н
ELEM 427	Practical	Videography	2	Н
ELEM 428	Practical	Computer Animation (2D&3D)	2	Н
ELEM 429	Practical	Project-2	2	Н
III Semester				
ELEM 511	Theory	Production Planning & Management	3	Н
ELEM 512	Theory	Television Production	3	Н
ELEM 513	Theory	Radio Production	3	Н
ELEM 514	Theory	Radio & TV News casting	3	S
ELEM 515	Theory	Television Studies	3	S
ELEM 516	Practical	Television Production	2	Н
ELEM 517	Practical	Anchoring & Newscasting	2	Н
ELEM 518	Practical	E-content Development	2	Н
ELEM 519	Practical	Project-3	2	Н
IV Semester				
ELEM 521	Theory	Media Law & Social Responsibility	3	Н
ELEM 522	Theory	Media Convergence & Management	3	Н
ELEM 524	Practical	Production/ Dissertation + VIVA	3	Н
Hard agra = 60			75	

Hard core = 60 Soft core = 15

<sup>\*</sup>Internship for 30working days is compulsory for the students after 2<sup>nd</sup> semester, during Summer Vacation. The students are expected to work in the Television Channels/Advertising

Agencies/Animation Studios/Production Houses and Film Industry, according to their choice.

<sup>\*\*</sup> Industrial visit is compulsory for the students during the course to have an exposure on current trends and happenings in the field.

# **SEMESTER I**

# **ELEM 411 VISUAL MEDIA & COMMUNICATION**

Unit-1: Evolution of Human Communication. Definition, history and background of communication. Functions and objects of communication. Kinds of mass communication. Elements of communication. Barriers to communication. Mass media and functions of mass media. Listening. Group dynamics. Educational Media. Traditional media. Fine arts, theatre arts. Introduction to Media, culture and society.

Unit-2: Visual Elements. Visual culture. Visual Pleasure and Visual Disruption. Reading Pictures. Vocabulary of color. Drawings. Portraits. Landscapes. Photo-features. Photographs and their communication. Visual thinking and Designing of Visual media. Illustration- Conceptual approach. Qualities of a good illustration. Illustration problems. Illustration techniques. Types of illustrations.

Unit-3: Evolution of Visual communication. Art Direction. Applications of visual communications in commercial contexts. Kinds of films and their impact on society. Films divisions. Role of NGOs. Panorama of twentieth century cinema. History of Films in India.

Unit-4: History of Television. Technology Evolution. Television transmission. TV picture resolution. Component and Composite Video. Ku- band, c-band, S- band and telecast channels. TV reception methods. Receiver plans and devices. Remote control systems. Global and National TV viewers. Growth of TV in India.

Unit-5: Modern methods of Visual Communication including mobile systems, cell phones. Digital Television-Transmission and Reception. Cable Television. Role of reach by visual media communications. Imax and 3D movies. Awards and recognition for visual media.

- 1. Media and Communication management-C.S.Raghu, Himalaya Publishing House, Mumbai, 1993
- 2. Mass media and Communication Theory, Ved Prakash Gandhi, Vol-3., Kanishka Publications, New Delhi-1995.
- 3. Radio and TV Journalism, K.M.Srivastava, Sterling Publishers Pvt. Ltd., New Delhi, 1989
- 4. Media Education, Communication and Public Policy, K.S.Kumar, Himalay Publishing House, New Delhi, 1996.
- 5. The Process of Communication, David Berlo
- 6. Theories of Mass Communication, Melvin D. Flour and Evelette Dennis.
- 7. The Process and effects of Mass communication, Wilbur Schramm
- 8. Visual methodologies, Gillian Rose, Sage publications, 2001
- 9. Visual Media Communication, Pradeep Manday, Authors Press, 2001.
- 10. Doing Visual Ethnography, Sarah Pink, Sage Publications, 2001.
- 11. Film production, Steven Bernstein, Focal Press, 2004.

#### ELEM 412: DIGITAL MEDIA & INSTRUMENTATION

Unit-1: Components of Radio. Audio equipments, their types and their usage. Audio capturing, amplifying, transmitting and recording devices. Microphones. Cordless microphones. Audio storage media and types and uses. Types of audio delivery systems. Audio mixers. FM and AM tuning. Frequency bands used in Radio communications. ADCs and DACs.

Unit-2: Photographic equipment and types of photography. Digital and film photography. Digital images and their characteristics. Pixels and resolutions. Digital Camera and their types. Image printing equipment. Storage and memory issues of digital images. Scanners and their applications. Digitizing tablets and Electronic boards.

Unit-3: Basics of Video. Analog and Digital Video. Types of color video signals-Component Video, Composite video. S-video. Chroma sub-sampling, NTSC video, PAL Video, Digital Video. Video Scanning Formats. Video and audio compression. Definition, purpose and types of compression. MPEG video layers. Motion estimations. MPEG video bitstreams. Decoding.

Unit-4: Equipment for Videography. Handycam and Broadcast quality Video Camera. Features of Video cameras. Video capturing devices. Web Camera. PTZ camera. Video tuning cards. Video editing systems and their components. Video mixers. Video file rendering, storing and retrieving systems. Streaming of video over net. Block diagram of color TV receiver description of each element. CCU, signal stabilizers, special effect generators, character generators.

Unit-5: Computer components and other peripheral devices. Lighting and displaying equipment. CDROMs and DVDs and their characteristics. VCD players, DVD players. Compatibility and convertibility of various instruments and files. Monitors. LCD, Plasma screens, IPOD, PDAs, Multimedia projectors, IMAX theatre facilities, Computer networking and equipment. Types of cables and their uses.

- 1. Monochrome and Color TV, R,R. Gulati, New Age Int. (P) ltd., New Delhi, 2001
- 2. Color TV- Principles and Practice, R.R. Gulati, New Age Int. (P) ltd., New Delhi, 2001
- 3. Douglas V.Hall, Microprocessors and digital systems, McGraw Hill, 1983.
- 4. Handbook for Sound Engineers, Glen Ballou, Third edition, Focal Press, 2002.
- 5. The Sound Studio, Alec Nisbett, Seventh Edition, Focal Press, 2003.
- 6. Practical Recording Techniques, Bruce Bartlett and Jenny Bartlett, Third Editions, Focal Press, 2001.
- 7. Digital Camera Techniques, Jon Tarrant, Focal Press, 2002.
- 8. Digital Imaging for Photographers, Adrian Davies, Fourth Edition, Focal Press, 2001.
- 9. Digital Imaging, Joe Farace, Focal Press, 2001.
- 10. Videomaker Guide to Digital Video and DVD Production, Videomaker, Third edition, Focal Press, 2004.
- 11. Encyclopedia of Electronic Media, Christopher Sterling, Focal Press, 1998.
- 12. "Digital Computer Fundamentals" Thomas C. Bartee, Tata McGraw Hill, 1996.
- 13. Computer System Architecture, Mano M.M, Prentice-Hall of India, IInd edition, 1993.

## **ELEM 413: SCRIPT WRITING FOR ELECTRONIC MEDIA**

Unit-1: Basics of Scripting. Script: meaning and types of script. Role of a scriptwriter in media. Elements of good script. Concept of content and form. Importance of General Knowledge and understanding in a theme. Process of scripting: idea formation, research, sequencing, opening and concluding.

Unit-2: Writing Television Script. Writing for visuals. Concept of spoken language. Relation between narration and visuals. Script layout: treatment, screen play one page and split page, shooting and editing script etc. Writing for fictional and non fictional program.

Unit-3: Radio Scripting and Language. Writing to sound. Element of radio script. Stages of scripting and editing. Writing for different programmes like Talk, news, news reel, documentary, drama and tele serials. Standardisatio n of TV Quiz.

Unit-4: Analysing the scripts of Popular documentaries, films, teleserials and promotional videos. Script wiring for cartoon movies. Role of idioms and phrases, proverbs, statistical facts and adjectives in narration of a script. Use of common sense.

Unit- 5: Script writing for educational documentaries. Script writing for tele serials. Script writing for a feature film. Analysis of famous movie scripts. Analysis of scripts written for enrichment programmes. Scripts for short-films. The concept of time in script. Scripting for commercials.

- 1. Writing, Directing and producing Documentary films, Alan Rosenthal, Southern Illinois University Press, 1990
- 2. News, Public relations and Power, Simon Cottle, Sage Publications, New Delhi, 2003
- 3. Media making, Lawrence Grossberg, Sage Publications, New Delhi, 1998
- 4. Managing Presentations, Savita Bhan Wakhlu, Sage Publications, New Delhi, 2000
- 5. Advertising, Liz Mcfall, Sage Publications, New Delhi, 2004
- 6. Participatory Video, Shirley A. White, Sage Publications, New Delhi, 2003
- 7. Media Organisation and production, Simon Cottle, Sage Publications, New Delhi, 2003.
- 8. Video production handbook, Gerald Millerson, Focal Press, 1992
- 9. Directing the Documentary, Michael Rabiger, Focal Press, 1998.
- 10. Advertising basics, J.V. Vilanilam & A.K. Varghese, Sage Publications, New Delhi, 2004

## ELEM 414: LIGHT & COLOUR (Soft core)

Unit1 : Experience of color through experiments in various media. Transparent colours ( Water colour. Waterproof ink etc.) Opaque colours (Poster colour etc.)

Pastels wax crayons. Transparent papers (Cellophane)Experience of colour as:

Unit 2: Visual effects-What is Light? what is colour? Function of Eye.

Physical properties. Hue: Value, Chroma, tint, shade and tone, gray scale, chromatic value scale and colour value scale.

Unit 3: Colour experience in : Primary (Pigment and light theory), Secondary, Tertiary, Quarternary, Achromatic, Monochromatic, Polychromatic, High, Average, and lower, High average and low contrast,

Unit 4: Experience in colour harmonies: Complementary split. Double split complementary. Analogous. Warm and cool Naturalisation of colour.

Unit 5: Optical illusion. Advancing and receding colours. Simultaneous and successive contract. Visual mixing. Experience in rendering methods... Wash, broken, impasto, super imposition etc.,

Students should be made aware of all these principles of colour harmony by exposing them to the actual works of art done in various periods and styles.

- 1. **The Art of Color and Design** By Maitland E. Graves, Published by McGraw-Hill, 1951, Original from the University of Michigan,439 pages.
- 2. Color Is Communication: Selected Projects for Foster + Partners 1996>2006 by Per Arnoldi. 224 pages. Published by Birkhauser. The 10 digit ISBN is 3764375035 and the 13 digit ISBN is 9783764375034.
- 3. **Colour: How to Use Colour in Art and Design** By Edith Anderson Feisner, Published by Laurence King Publishing, 2006, ISBN 1856694410, 9781856694414, 192 pages.
- 4. **Creativity 36** by David E. Carter. 400 pages. Published by Harper Design Intl. The 10 digit ISBN is 0061255726 and the 13 digit ISBN is 9780061255724.
- Critical Studies in Art and Design Education, By Richard Hickman, Contributor Richard Hickman, Published by Intellect Books, 2005, ISBN 1841501271, 9781841501277, 224 pages
- 6. **Post-Production Colour** by Steve McLeod. 175 pages .published by Ava Pub. The 10 digit ISBN is 2940373590 and the 13 digit ISBN is 9782940373598.
- 7. **The Essential Lighting Manual for Photographers #by Chris Weston**. ISBN-10: 2940378460, ISBN-13:9782940378463.
- 8. **Lighting** by Chris Weston. November 2007,144 pages. Published by Ava Pub. 10 digits ISBN is 2884791019, 13 digit ISBN is 9782884791014.

# **ELEM 415:** PHOTOGRAPHY

- 1. Photographing News Events.
- 2. Photographing Accidents.
- 3. Photographing Cultural Events.
- 4. Photographing Human Interests Stories.
- **5.** Developing the Negatives.
- **6.** Printing the Negatives.

.

# **ELEM 416:** GRAPHIC DESIGNS

Logo, Visiting Cards, Brochures, Pamphlets, Hoardings, Creating Magazine Covers, Book Designs

Photography-Working with Images, Processing. Introducing ink effects. Multimedia building blocks. presentation tools. NIFF. Production Tips Images. Still images. Color and Image file formats. Color models.

**METHODOLOGY:** Extensive Studio Work and Outdoor Studies with Lecture Inputs. Class Projects May Be Assigned Over A Period Of Time With Students Having The Option Of Working Independently And Submitting The Work On The Given Dates. Periodical Critiques Should Be Conducted. Visit To Artist's Studios.

## **ELEM 417:** EDITING DIGITAL AUDIO

- 1. Understanding Sounds, decibels and hearing. Frequency, noise, amplitude. Sound isolation.
- Analog and Digital audio technology. MIDI and electronic instrument technology.
   Advantages of Digital audio. Sound files. Digital audio file formats.
- 3. PCM, telephony and text formats. Mono-stereo, surround, DTS, stereophonic, Dolby and Karaoke sounds. Signed versus unsigned.
- 4. Digital Audio Recording. On-line Recording. Monitoring. Noise reduction. Hum prevention. Judging sound quality. Volume and dynamics.
- Filter and equalization. Line sources. Fades and mixes. Sound effects. Shaping sound. Delayed recording.
- 6. Methods of handling Media players and their applications. Audio editors.
- 7. Digital Audio mixing.

- 8. Applications of popular digital audio editing tools. Recording options in sound editors. Recording Device controls. Text to speech conversion. Speech to text conversion. Text to digital audio file creation. Audio for video.
- 9. Depth and dimension in recording, mixing and mastering. Digital music composers. Sound aesthetics-sound scripting, sound dubbing.

# **ELEM 418:** Project-1 (Photojournalism or Radio Production)

# RADIO PRODUCTION (OPTION)

- 1 Radio Programme fundamentals, Purpose, Type of radio programmes characteristics News, Drama, Music, Talk, Interview, Group discussion, Documentary.
  - 2 Information and Script Writing for radio programmes Standard Script forms
  - 3 Writing for Radio Style grammar format writing tools, creative writing & editing
  - 4 Sound recording Editing Sound effects
  - 5 Style of radio announcements Compeering Narration Voice Modulation
- 6. Methods of Interviews, Location of recording, Music recording, Magazines, Remote broadcast.
- 7. News reading and presentation methods, pronunciation, vocals stressing, Inflection, quotation marks, errors and emergencies. Headphones, Trials and promos. Phone in programmes, Business letters.
- 8. making commercials and discussion programmes. Purpose and styles. Voicing and treatments. Music and effects. Controls of discussion programmes. Ending the programmes.
  - 9. Satellite Radio- worldspace.

# PHOTOJOURNALISM (OPTION)

- 1. Photographing News Events.
- 2. Photographing Accidents.
- 3. Photographing Cultural Events.
- 4. Photographing Human Interests Stories.
- **5.** Developing the Negatives.
- **6.** Printing the Negatives.

## SEMESTER II

# **ELEM 421: VIDEOGRAPHY**

Unit-1: Basics and Importance of Videography. History of Videography. Purpose and advantages of of videography. Limitations and applications of Videos. Outdoor and Studio Videography. Elements of Composition. Framing, Image size, angle and lens. Practical Consideration while shooting. Planning for videography.

Unit-2: Lens and image formation – focal length, F-number, T-number, types of lens, image formation, magnification, wide and telephoto lens, filters, ND filter, normal lens, depth of focus. Video tapes & formats. Types of shots, camera angles, floor management, black body radiation, color temperature, white and black balance, gamma correction, beam splitters, demo camera movements, tripod setting, hand held shots, tracks and trolleys.

Unit-3: Camera movements-panning, tilting, tracking, craning, and zooming. 180 axis of action rule. Imaginary line and continuity. Screen directionality. White and black balance. Gain control. Centering, registration. Filter selection. Color temperature. Vide finder adjustments. Genlock and other controls.

Unit-4: Basics of lighting. Key fill, back light and background light, use of reflectors, out door shooting, matching indoor and out door lighting. Lighting and exposure. Lighting technology, direct light, diffused light, illumination, units of light - Lux, brightness, contrast.

Unit-5: High Definition and 24P cinematography. Picture quality. Display quality. Frame rates and scanning. On-board VTR usage. Professional Formats. Image set operations. Hazardous conditions. Safety and security measures. Role of videography in story telling. The future of Videography.

- 1. Participatory Video, Shirley A. White, Sage Publications, New Delhi, 2003
- 2. Media Organisation and production, Simon Cottle, Sage Publications, New Delhi, 2003.
- 3. Video production handbook, Gerald Millerson, Focal Press, 1992
- 4. Multimedia and Virtual Reality Engineering, Richard Brice, Newnes Pub., 1997.
- 5. Standard handbook of Video and Television Engineering, Jerry Whitaker and Blair Benson, McGraw-Hill, New York, 2000.

# ELEM 422: COMPUTER ANIMATION (2D & 3D)

Unit-1: Fundamentals of Computer Graphics. Concepts, elements, principles of visual design, layout principles, Balance, contrast and harmony, perspective design & communication. Electronic media design (television & computer) – Still & moving, visual only, text only, visual & text. Tools for creating visual design – for print and electronic media, automation and graphics.

Unit-2: Language of color, form & color, theory of contrasts, illusions of Space & Form, design psychology. Graphics input - output devices: Direct input devices - Cursor devices - direct screen interaction - logical input. Line drawing displays - raster scan displays. Two dimensional graphics. Raster graphics. File formats –GIF , JPEG ,TIFF , Graphics Animation Files , Postscript/Encapsulated Postscript files.

Unit-3: The art of animation -animation aspects, color and texture, animation principles. Elements of animation. Preparing for animation. Steps of recording animation, Animating with space to time. Segment manipulation options.

Unit-4: Introducing ink effects. Making multimedia Animation. Creating a cast number within paint, rotating cast members. Creating a film loop. Using the tools. Pallets. Importing cast members.

Unit-5: Introducing interactivity. Non-linear animation, Flash animation, 3D illusion, asymmetry, overall composition, logo, and creation shooting and editing videos. Animation using flash, Director, Morph and other packages.

- 1. John R.Rankin, "Computer Graphics software construction", Prentice Hall of Australia Pvt. Ltd., 1989.
- 2. William M.Newmann, Robert F. Sproull, "Principle of Interactive Computer Graphics", McGraw Hill International Book Company, 1989.
- 3. B.S.Hi.., JP., "Computer Graphics" Maxwell Macmillan International editions, 1990
- 4. James Alan Farrel, "From PIXELS to ANIMATION: An introduction to Graphics Programming", AP Professional, 1994.
- 5. Rod Salmman, Mel Slater, "Computer Graphics: Systems and concepts", Addison Wesley Publishing Company, 1987.
- 6. Roy A. Plastock, Gordon Kalley, "Theory and Problems of Computer Graphics", Schaum's outline series, McGraw Hill International editions, 1986.

## **ELEM 423: MEDIA RESEARCH**

Unit-1: Concept of research. meaning, definition and nature of research. Purpose of research. Communication research and Importance of media research. Area of Media Research. Problems of objectivity in research. Planning to carry out research.

Unit-2: Methods and techniques of research. Hypothesis and variables. Research design and its types. Methods of research. Research in language and literature. Research in sociology. Research in Journalism and mass communication. Census, Survey, Random, Sampling - meaning, types and problems. Survey research, experimental and field research, panel research. Reliability, validity and objectivity.

Unit-3: Tools and methods of research. Sources of data - primary and secondary source. Questionnaire and schedules. Observation - participatory and non participatory. Interview method. Case study approach. Content analysis of audio and video.

Unit-4: Research and electronic media. Importance of research in media. Application of research in electronic media. Formative and summative research. Ethical issues in media research. Media research as a tool of reporting.

Unit-5: Application of Statistics. Tabulation and classification of data. Data analysis, software for data analysis interpretation. Elementary statistics - mean, median and mode. Inferential statistics - correlation and regression and test of significance, principle and theory. Graphic and diagrammatic representation of data. Indexing, citation and bibliography. Research report writing.

- 1. Qualitative Communication research methods, Thomas Lindlof and Bryon Taylor, Sage Publications, 2002
- 2. Media and Communication research methods, Arthur Asa Berger, Sage Publications, 2000
- 3. Media Analysis Techniques, Arthur Asa Berger, Sage Publications, 1998.
- 4. Media Research techniques, Arthur Asa Berger, Sage Publications, 1998
- 5. Media Resaerch methods, Arthur Asa Berger, Sage Publications, 1999

## **ELEM 424: WEB TECHNOLOGIES**

Unit-1: Definition of Multimedia. Multimedia systems. Multimedia elements. Multimedia applications. Multimedia system architecture. Evolving systems of multimedia- HDTV, UDTV. Digital signal processing. Multimedia file formats, standards, communication protocols, conversions. Data compression and decompression. Types and methods of compression and decompression. Multimedia I/O Technologies.

Unit-2: Internet technology. An overview of OSI model. History of the World Wide Web. Web documents. Web servers, browsers and Web spiders. Search engines and applications. E-commerce. E-learning. E-Examinations. Active Server Pages. Personal Home Pages. URLs and Call activations. File transfers over the net. Mirror sites.

Unit-3: Internet Services. ISPs. Types of ISPs. Setting up of an Internet account. Connect to WWW by configuring your own TCP/IP. Installing and configuring the modem. Internet options and their usage. Multimedia application classes. Game systems. Interactive TV. Set top boxes. Video conferencing.

Hypermedia mails.

Unit-4: Introduction to HTML. HTML Tags .and their applications. Commonly used HTML Commands. Structure of an HTML program., Document Head. Document Body. Lists-Types of Lists (Unordered List (Bullets), Ordered Lists (Numbering), Definition Lists). Adding Graphics to HTML Documents.

Unit-5: Tables: Introduction to Header, Data rows, Caption Tag. Width, Border, Cell, color, span attributes. Linking Documents. Links (External Document References, Internal Document References); Images as Hyperlinks (Image Maps). Frames and their usage. Methods of creating web pages- in-line frames, handling of media elements in web pages.

- 1. Designing TCP/IP Internetworks, Bennet Geoff, Galgotia Publications Pvt.Ltd, 1998, New Delhi
- 2. A Text Book of Internet & Web Page Design, Srivastav Raj Kumar, Dominant Publishers and Distributors, 2001, New Delhi
- 3. The Internet Book, Comer Douglas.E., Prentice Hall of India Private Limited, 2003, New Delhi
- 4. Internet With Web Page, Web Site Design Bible, Underdahl Brain & Underdahl Keith, Idg Books India (P) Ltd, 2000, New Delhi
- 5. Webmasters Handbook, Galgotia, Prima Publishing, 0, New Delhi
- 6. Hands On Html, Robertson Greg, Bpb Publications, 1999, New Delhi
- 7. Mastering Html 4 Premium Edition, Ray Deborah.S. & Ray Eric.J., Bpb Publications, 1999, New Delhi
- 8. The Complete Reference Web Design, Powell Thomas.A., Tata McGraw-Hill Publishing Company Limited, 2000, New Delhi
- 9. Professional Web Design Theory and Technique On The Cutting Edge, Holzschlag Molly.E., Galgotia Publications Pvt. Ltd, 1997, New Delhi
- 10. Designing Interactive Websites, Mohler James.L. & Duff Jon.M., Thomson Learning, 1999, Africa

## **ELEM 425:** ADVERTISING MEDIA & CASE STUDIES (soft core)

Unit-1: Nature and scope of advertising. Evolution of advertising in India and other nations. Advertising and market economy. Advertising and media industry. Electronic media as business. Programme management (Planning, scheduling, production and broadcasting). Nature and scope of new delivery systems. On-line marketing.

Unit-2: Changing role of Corporate Media. The key Players. Media Groups in the Corporate world. Content outline for corporate media. Creativity requirements. Treatment. Dialogue and narration. Structure and transitions.

Unit-3: The role of Director. The role of the Chief Executive Officer. Human aesthetics, Audiovisual aesthetics, Technical aesthetics. General aesthetics. Post-production overview.

Unit-4: Media marketing. Market survey: media, product and audience profile. Television rating point (TRP). Agencies of rating, process and method of rating. Selling of a programme.

Unit-5: Overview and analysis of advertisement promos in popular TV and Radio Channels. Studies on advertising and sales functions in electronic media organizations, emphasizing the sales process, rating systems, and rate cards. Studies on advertising agencies, media buyers, and research organizations.

- 1. Corporate Media presentation, Ray Dizazzo, Focal Press, 2003.
- 2. Media, Public Relations and Power, Simon Cottle, Sage Publications, New Delhi, 2003
- 3. Practical Public Relations, Sam Black
- 4. Handbook of Public Relations, Robert L. Heath, Sage Publications, New Delhi, 2000
- 5. The Business of Media, David Croteau, Sage Publications, New Delhi, 2001
- 6. Advertising Basics, Vilanilam and Varghese, Sage Publications, New Delhi, 2004.
- 7. Advertising Culture, Sean Nixon, Sage Publications, 2003.

#### **ELEM 426: EDITING DIGITAL VIDEO**

- Editing software and consoles. Basic Editing technology. Criteria for editing picture, narration and music. Editing equipment - recorder, player, Video Switcher, audio mixer, monitor, speaker, special effect generator, non linear workstation. Types of editing assemble and insert editing, on line and off line editing, cut to cut and AB roll editing, Non linear editing (basic softwares)
- 2. Principles of non-linear editing, proper start up and shut down procedure, finding files, savings, copying & back up, introduction & principles; terms, concepts & digital editing.
- 3. Logging and organizing the footage. Digitizing from format.
- 4. Trimming, graphic keying, motion effects, audio mixing, composting, media file management. Generating an EDL, a reference tape and online a final master. Exporting digital file formats including streaming media. Equipment required for non-linear editing system.
- 5. Use of Editing control tract, time codes, basic editing process, insert editing, offline versus online editing, variety of editing, continuity, sequence building, dramatic structure, narration & how to add music & effects.

# **ELEM 427: VIDEOGRAPHY**

- 1. Using digital photographic equipment. Camcorder functions- aperture and exposure, depth of field, focusing, panning, tilting, zooming of objects.
- 2. Using a Tripod, Recording sound, adjusting color and contrast, Basic lighting.
- 3. Creative videography- shot sizes and types, composition, visual sense, visual flow, editing in-camera
- 4. Indoor and Outdoor Shooting methods. Shooting of ceremonies and wedding, special occasions, sports and action, theatre performances, natural scenes, informal parties, family outings, class room lectures, group Discussions, quiz programmes. Adventure shooting, Innovative methods of shooting, Camera angles and movements. Shooting Micro objects. Wide angle shooting, trolley and crane shots.
- 5. Multi-camera setup. Tape-less recording. Computer video recording.

# ELEM 428: COMPUTER ANIMATION (2D & 3D)

- 1. Animation aspects. color and texture.
- 2. Animation principles. Preparing for animation.
- 3. Animation for integration
- 4. Concept, Story and Scripting for 3D Feature
- 5. Character Designs using 3D Software
- 6. Design and Layouts of backgrounds using 3D Software
- 7. Key frame animation of characters using 3D Animation software
- 8. Texturing of backgrounds and characters using 3D package Application of 3D titling

# ELEM 429: Project-2. (Indoor Video) Any one of the following

- 1. Topic/theme based programme (1+3 discussion exercise)
- 2. Current affairs type programme
- 3. Mime, Music , Entertainment, Quiz, Science, ETV type programme and Studio Live (a live studio exercise)
- 4. Magazine Programme (Themes can be targeted to children, youth, women, family, senior citizens, etc.,)

(Multi-camera setup with full PCR setup )

# **Semester III**

# **ELEM 511: PRODUCTION PLANNING & MANAGEMENT**

Unit-1: Need for production planning. Elements of Production planning. Pre production and Post production planning. Duties and responsibilities of producer/director. Production Package, Production Designers. Production office. Best laid plans.

Unit-2: Planning of Studio operations. Set designing and make up – visualization and composition-aesthetics-directing the actors-directing the crew planning in career. Costing and budgeting of programme. Commissioned and sponsored programme.

Unit-3: Planning in career. Planning and Production of indoor and outdoor shootings. Planning and management of live shows. Functions, roles, and skills of media managers in broadcast, cable and corporate facilities, with emphasis on financial management, personnel management, programming, physical systems, and regulations.

Unit-4: An overview of management theory. Financing a production. Moving the budget down. Markets and marketing. Digital Asset Management. Rich Media. Streaming management. Repurposing of assets. Storage management and archiving. Rights management. Contracts management. Anti-piracy measures.

Unit-5: Project planning. Project Development Life cycle. Sample business plan for a fictional company.

- 1. Media Organisation and Production, Simon Cottle, Sage Publications, New Delhi, 2003
- 2. Filmmakers and Financing, Louise Levison, Focal Press, 2003.
- 3. Raindance Producers Lab: Lo-to-No Budget filmmaking, Elliot Grove, Focal Press, 2004.
- 4. Digital Asset Management, David Austerberry, Focal Press, 2003.

#### **ELEM 512: TELEVISION PRODUCTION**

- 1: Fundamentals of video. Photography and video. Camera. Tape and recording. Film transfer and Video processing. Audio and power devices. Video display systems. Multi-camera production.
- 2: Camera parameters. Lens. frames. films. exposure. focusing. sharpness and contrast. Cameral filters. Lighting systems. Lighting methods and needs. Shooting plans and backgrounds. Getting organised for shooting. Importance of . backgrounds. Real and unreal backgrounds. Neutral background. Economical settings. Location selection. Pre-production planning.
- 3: Editing in videography. Basics of video editing. Physical editing. Cutting points and transitions. Order of shots. Editing methods. Generations of editing. Edit controllers. Post-production editing. Good editing techniques.
- 4: Production techniques. Script writing. Purpose of scripts. Length and style of scripts Story boards and components. Pre and post-production techniques. Effective shots. File shots. Footages. Special effects. Graphics and animation. Chroma key usage. Economy shooting.
- 5: Writing for TV News & Current Affairs Programmes TV Anchoring TV Camera Types TV Post Production Techniques, International Standards for Digital Audio & Video The Future of World TV.

### **Books for Reference:**

- 1. Video Production Handbook Miller (Focal Press)
- 2. Working with Video: A Comprehensive Guide to the World of Video Production Winston Brian and Julta Kevdal
- 3. Basic TV Staging Millerson Gerald (Focal Press)
- 4. Video Camera Techniques Millerson Gerald (Focal Press)
- 5. TV Sound Operations Glyn Alkin
- 6. Sound Techniques for Video- TV Media Manual Series (Focal Press)
- 7. The Moving Image: Production Principles as Practices Foresman Company
- 8. Understanding TV Prager
- 9. Techniques of TV Production Gerald Millerson
- 10. TV Production Handbook H Zettel
- 11. Audio Visual Journalism B N Ahuja
- 12. Writing for TV & Radio Robert Hellard
- 13. TV News Fang L F
- 14. TV Production Allan Wurtzel
- **15.** Introduction to TV Journalism S Kaushik

## **ELEM 513 RADIO PRODUCTION**

- 1. History of Radio. Characteristics of radio medium. Radio production fundamentals. Purpose of production and type. Information and scripting. Interviewing. Methods of interviews.
- 2. Techniques of Sound Recording, Sound Effects, Editing. Radio in India; use of radio for education; instructional programmes in radio; conceptualization for educational radio; research for radio programmes. Location of recording. Narration Styles. Music recording. Magazines and sequences. Remote broadcasts. Evolution of radio broadcast in India. Radio as an educational tool. Radio programmes and formats.
- 3. Target audience for production of programmes for radio; formats for programmes, planning and scripting for radio programmes, collection of material for programmes; documentation; production of programmes for radio, evaluation, assessment and analysis.
- 4. Writing for radio News Interviews Special Audience Programme News Reading Techniques. News policy and practice. Structure of News Story. 5 Ws and 1 H of news. Inverted Pyramid style. Hard and Soft Leads.
- 5. News reading and presentation methods. Pronunciation. Vocal stressing. Inflection. Quotation marks. Errors and emergencies. Headphones. Trails and promos. Phone-in programmes. Listener's letters.

#### **Books for References:**

- 1. Radio: A Guide to Broadcasting Techniques E Evans
- 2. Hand Book of Broadcasting Waldo Abbot and R Rider (McGraw Hill)
- 3. Techniques to TV Production Rudy Bretz (McGraw Hill)
- 4. Broadcasting and the People =- Mehra Massani (NBT)

#### ELEM 514: RADIO & TELEVISION NEWSCASTING

Unit-1: Radio production fundamentals. Purpose of production and type. Information and scripting. Interviewing. Methods of interviews. Location of recording. Narration Styles. Music recording. Magazines and sequences. Remote broadcasts. Evolution of radio broadcast in India. Radio as an educational tool. Radio programmes and formats.

Unit-2 News policy and practice. Structure of News Story. 5 Ws and 1 H of news. Inverted Pyramid style. Hard and Soft Leads. Mews reading and presentation methods. Pronunciation. Vocal stressing. Inflection. Quotation marks. Errors and emergencies. Headphones. Trails and promos. Phone-in programmes. Listener's letters.

Unit-3: Components of TV news. Live Telecast environment and its significance. Work elements. Video and Audio Elements. Interactive Elements. Technical elements. Types and Importance of news items. Priority Issues. Catchy items. Sequencing of TV news bulletins. Role of TV News editors. Role of Studio and media Professionals in TV News casting.

Unit-4: News production and requirement, electronic still, electronic news gathering, satellite news gathering. Role of OB vans. Webcasting Video Clips for News. Breaking News. Headlines. Repetitive cycles of news. Importance of archive and stock shots for news editing.

Unit-5: News production teams & their roles. Television News Language – Pronunciation, voice delivery (infliation and defliation), accent. TV news as compared to news in Print Media, news for Interval, news portals. Flash news scrolling. Logo and Weather updates. Risk Management in Newscasting.

- 1, Radio Production, Robert Mc Leisch, third edition, Reed Elsevier, Oxford, 1994.
- 2. Multimedia and Virtual Reality Engineering, Richard Brice, Newnes Pub., 1997.
- 3. Standard handbook of Video and Television Engineering , Jerry Whitaker and Blair Benson, McGraw-Hill, New York, 2000.
- 4. Film Cultures, Janet Harbord, Sage Publications, 2003
- 5. News and News Sources, Paul Manning, Sage Publications, 2001.
- 6. The Globalisation fo News, Oliver Boyd Barret, Sage Publications, New Delhi, 1998.

# **ELEM 515:** TELEVISION STUDIES (soft core)

Unit-I: Genre of static base and then target audience. TV production- Music shows, dance shows, reality shows, quiz, personality interview, Political discussion, current affairs, election campaign, Election Results and analysis, News Presentation, weather report.

Unit-II: Genre of Single camera Production- Documentary, telefilm, Experimental video, Outdoor, Soft stories, Teleserials, Crime subjects enacted.

Unit-III: Advantages and Disadvantages of various distribution systems- Terrestrial, cable with & without CAS (set top box), Direct to home, web streaming. IPTV

Unit IV: Public service Tv, Commercial TV, religious TV, Sports TV, Discovery channel / NGC

Unit V: How audience are influenced by TV Programmes and commercials- Children, Youth, women, Political leaders and senior citizen.

- 1. The Television Studies Book- David Lusted and Christine Geraghty
- 2. An Introduction to Television Studies Jonathan Bignell -: Routledge 2007
- 3. The Television Studies Reader-Edited by Robert C. Allen, Annette Hill
- 4. TELE-VISIONS: An Introduction to Television Studies Glen Creeber British Film Institue,2006

## ELEM 516: TV. PRODUCTION

- Production planning, pre production and post production planning-duties and
  responsibilities of producer/director. Production techniques-video format; documentary,
  serial, talk show, interview, demonstration, discussion, profiles, commercials. Set
  designing and make up visualization and composition-aesthetics-directing the actorsdirecting the crew.
- 2. Planning and Production of indoor and outdoor shootings, planning and management of live shows.
- 3. Film transfer and Video processing. Video display systems. Multicamera production. Lighting systems- Lighting methods and needs. Mike positioning and arrangements.
- 4. Shooting plans and backgrounds. Getting organised for shooting.
- 5. Importance of backgrounds. Real and unreal backgrounds. Neutral background. Economical settings. Location selection. Post-production editing
- 6. Applications of Production techniques- Script, Length and style of scripts, Story boards and components, Pre and post-production techniques, Effective shots, File shots, Footages, Special effects. graphics and animation, Chroma key usage and Economy shooting methods.

# **ELEM 517: ANCHORING & NEWSCASTING**

- 1. Understanding the various roles of live & recorded television presenters, Do's and dont's for the presenter. Developing language skills. Correcting diction, Voice, speech and breath exercise, Body Language, Familiarization with the technical parameters of camera, multi camera setups, light and sound.
- 2. Creating a bond with the unseen audience, Performing with make shift tele prompters. Over coming glitches, Preparing and researching for your subjects, Interviews skills, Live reporting, Interaction with celebrity presenters, Grooming and make-up, Demo Film
- 3. Introduction and overview, basic control room, newsroom staff descriptions, write a story and discuss, review a newscast.
- 4. Discuss news standards, the business of broadcast news, the lineup meeting, structuring a newscast, writing for a newscast; deconstruct an actual "Evening News" and technical orientation
- 5. Story meeting, technical orientation, practice at positions including anchoring, interviewing and narrating, lineup meeting, writing and actually produce a simulated newscast
- 6. Produce a LIVE newscast: lineup meeting, gather material, writing, rehearsing functions, broadcast LIVE

#### **ELEM 518: E-CONTENT DEVELOPMENT**

- 1. The level of E-content: Four levels of The Revised Bloom's Taxonomy: Knowing, Understanding, Applying and Analyzing Information.
- 2. Elements: Frame count Frames per hour of content, including branch frames **Engagement:** visual supported with audio extensively.- Content be presented in layers to engage the learner in animation and gaming based learning cycle. Interactions: Point and Click, Drag and Drop incorrect items to trash bin Drag labels to a diagram, Match the following and sequencing, Text input. Frequency of interactions. Monitoring: Learner through remediation cycles (every 3-4 screens). Emulations, simulations, gaming threads and concept animations. Media: Animations, illustrations, slideshows, interactivities, Video, photographs and audio clips. Animation, Self-running, non-interactive 2D animations. Audio narrative of the onscreen-text. Audio toggle on/off. Video Streaming.
- 3. Assessment: Self-assessment, self-assessment question for every 5 content frames- Types: Point and Click, Multiple Choice, True/False, Text Input (Objective and Subjective), Drag and Drop, Situational, "What If" queries and Adaptive. Quiz: Assessment items per learning objective Types: Point and Click, Multiple Choice, True/False, Text Input (Objective and Subjective), Drag and Drop, Situational, "What If" queries, Randomization of test items. Feedback: Assessment items -single level or multiple levels of feedback. The multiple levels of feedback with a maximum of cues. Types of feedback: include, Knowledge-of-response, Verifies whether the learner response is correct or incorrect.
- 4. Experience: The learners experience presenting content in a linear, screen-by-screen, single-path presentation. One idea after another Navigation buttons: Site Map: Glossary: Help:
- 5. Authoring Environment: Using HTML, DHTML, Flash 6, and JavaScript. Other authoring environments, such as Director, and Authorware
- 6. Context: Teaching Facts, Concepts, Procedure, Principle, and Process: Application and Analysis, Cognitive domain, using problem solving.
- 7. Outcome :Problem solving, Critical thinking, a.Understanding cause and effect, b. Applying information according to a rule or principle in a specific situation, c. Hands-on practice, Cues: Apply, demonstrate, practice, use, construct, complete, solve, modify, change, discover, operate, produce, prepare, choose, investigate, employ, schedule.

# **ELEM 519:** Project-3 (TV & Cartoon)

- 1. Documentary Film 5-7 Minutes (or)
- 2. 2D Animation for 2-3minutes or 3D Animation- 1 2 minutes
- 3. E Content Development
- 4. Radio Production

## **SEMESTER IV**

## ELEM 521: MEDIA ETHICS, LAW & SOCIAL RESPONSIBILITY

Unit-1: Press freedom and Law. Constitution and freedom of speech and expression. Contempt of court. Official Secrets act. Right to information Act. Right to Privacy. Legal issues of media screening and display. Who owns what?.

Unit-2: Media and Laws. Civil and Criminal law of defamation. Indian Penal Code (importance of Sections -124A,153AB,292,293). Criminal Procedure Code (Importance of Sections-93, 95, 96, 108, 144, 196, 327). Intellectual property rights. TRIP. Copy Right Act. Fair use of media policies.

Unit-3: Electronic Media Laws. Cinematography Act. TRAI. Prasar Bharti Act. Cable TV Network regulation Act. Information Technology Act. Convergence Laws. Cyber laws & regulations. Cyber crime.

Unit-4: Media Commissions and Committees. Press Commissions. Press Council - Media Council. Working Journalist Act. Autonomy of public broadcasting. Legal issues in community Radio, Theatres, CDROMS. Testing and Evaluation of media content. International agencies. Censors.

Unit-5: Media Codes and Ethics. Parliamentary Privileges: Article 105, 193 and 361A of constitution. Guidelines for Parliamentary coverage. AIR Code for election coverage. Uplinking rules. Doordarshan commercial code. ASCI. Advertising Council of India.

#### Reference:-

- 1. News, Public relations and Power, Simon Cottle, Sage Publications, New Delhi, 2003
- 2. Media and the Restyling of Politics, John Corner & Dick Pels, , Sage Publications, New Delhi, 2003
- 3. The Information Society, Armand Mattleart, , Sage Publications, New Delhi, 2003
- 4. Ethics of Cyberspace, Cees J. Hamelink, , Sage Publications, New Delhi, 2001.
- 5. Ethics and Journalism, Karen Sanders, , Sage Publications, New Delhi, 2003
- 6. India's Communicatio revolution, Arvind Sighal, , Sage Publications, New Delhi, 2001
- 7. Mass Media and Laws in india, B. Manna, Naya Prakash, calcutta, 1998.
- 8. Media Power, People, Plitics and Public Interest, Kanishka Publications, Delhi, 1999.
- 9. Media law for producers by Miller, Phlip H.
- 10. 11 Myths of media Violence by Potter, W James
- 11. Cyber Crime & law Enforcement by Dudeja, V.D.
- 12. Press Vidhi by Nand Kishore Trikha
- 13. Journalistic Ethics by PK Badhopadhyay and Kuldeep S. Arora
- 14. Press Laws by DD Basu, Prentice Hall Pub.
- 15. Mass Media Laws and Regulations in India, AMIC Publication.

#### **ELEM 522: MEDIA CONVERGENCE & MANAGEMENT**

Unit 1: An overview of media: global, national & local scene; Media economics- media industry analysis - Planning a media venture- scope, purpose, strategies and methodologies; venture creation and its practical, economic and legal aspects; Ownership patterns- sole proprietorship, partnership, private limited companies, public limited companies; Management functions-planning, organizing, directing, controlling; Organizational structure of different departments, its functions and synergy

Unit 2:Media convergence-its genesis, paradigm shift in social space and its impact, convergence regulation-Media convergence and marketing fundamentals; Advertising, retailing and media planning for cross platform media- Branding and media- property creation; Understanding media exposure – internet conversion rates, hits, Alexa, television ratings, (TRPs, Reach, Frequency), radio listenership, print readership-Media pricing- Rate cards, sponsored contents, developing spot rates-integrated branding approach across different media- Understanding the consumer-buying behavior models, market segmentation, targeting, profiling and positioning

Unit 3: Cross media interactivity in television-Using twitter, emails and SMS to interact with hosts in television - Planning and execution of programme production – production terms, control practices and Procedures; Administration and programme management in media – scheduling, transmitting, record keeping, quality control and cost effective techniques; Budget control, costing, taxation, labour laws and PR for building and sustaining business and audience through multiple media forms

Unit 4: Diffusion of innovation: new media and its influence on Indian consumer; Internet conversion ratios and related evaluation; Delivering digital media entertainment over the Web and mobile; Digital Interactive marketing- Cross media promotion of films through games-Digital Audio broadcasting – Digital Multimedia broadcasting – WiMAX mobile environment- Social interaction and marketing through Context Aware (Location Aware) technologies – Mobile social networking- New media project management and account handling; Online production and broadcasting; Identifying unconventional media spaces and business opportunities.

Unit 5: Understanding worldwide customer bases- developing a niche sphere; Planning for international campaigns; Business process outsourcing and the challenges; International media houses and their business model; Issues in intellectual property rights; Ethical issues in entertainment and content regulation; Broadcasting regulations-licensing and content, foreign equity in Indian media- issues and challenges- piracy and legal disputes: an overview.

## Reference books

Balancing on the Wire – The Art of Managing Media Organizations: James Redmond & Robert Trager, Atomic Dog, 2004.

Breach of Faith – A Crisis of Coverage in the Age of Corporate Newspapering: ed Gene Roberts, University of Arkansas Press, 2002.

Into the Buzzsaw – Leading Journalists Expose the Myth of a Free Press: ed Kristine Borjesson, Prometheus Books, 2002.

Leaving Readers Behind – The Age of Corporate Newspapering: ed, Gene Roberts, University of Arkansas Press, 2001.

Management of Electronic Media: Alan B. Albarran, Wadsworth, 2002.

Taking Stock – Journalism and the Publicly Traded Newspaper: Gilbert Cranberg et al., Iowa State Press, 2001.

The Business of Media: David Croteau & William Hoynes, Pine Forge Press, 2001.

#### **ELEM 523: MOBILE MEDIA APPLICATIONS**

UNIT 1: Wireless Communication fundamentals – Telecommunication networks - Telecommunication systems – GSM – GPRS – DECT – UMTS – IMT-2000 – Satellite Networks - Basics – Parameters and Configurations – Capacity Allocation – FAMA and DAMA – Broadcast Systems – DAB - DVB. Wireless LAN 9 -Blue Tooth. Mobile Network Layer 9: Mobile IP – Dynamic Host Configuration Protocol - Routing – DSDV – DSR – Alternative Metrics. Transport and Application Layers 7: Traditional TCP – Classical TCP improvements – WAP, WAP 2.0.

UNIT 2: Introduction to M-Learning- Mobile devices for e-portfolios - M-assessment - M-Teaching & learning - Moodle for mobile- Re-purposing content for mobile learning - Mobile devices in the classroom - Establishing a mobile learning infrastructure - Building a sustainable mobile learning environment - Procurement and selection of mobile devices - Mobile Learning in Higher Education: The combination of wireless technology and mobile computing - escalating transformations of the educational world. - assess the current state of affairs, surveying cyberculture - the wireless, mobile learning experience. The Contours of M-Learning: Ubiquitous computing, or ubicomp -describing wireless, portable, mobile "device ecology." P2P handheld gaming, moblogging, and uploading to RFID chips.

UNIT 3: Mobile technologies :mobile phones, smartphones, PDAs, MP3/ MP4 players - handheld gaming devices - Ultramobile PCs (UMPCs), mini notebooks or netbooks - handheld GPS or voting devices, and specialist portable technologies used in science labs. Virtual learning environments (VLEs) and management information systems (MIS) - Bluetooth-enabled devices. Wireless access points, Digital cameras, still and motion. USB drives. Fusion devices, such as combination phone/PDA/MP3-players. RFID tags.

UNIT 4: Impact of M-Learning - Altering the rhythms of social time - changed uses of social space. Texting within and between social situation- adding a secondary, socially oblique, communicative layer to everyday life. Multiple, distributed, radio-connected devices—from bridge-sensor arrays to Wal-Mart's use of RFID tags— new orders of research, information tracking, dataveillance, personal surveillance, and communication. new frontiers in art, such as moblogging, school surveillance, and spousal tensions. Integrated virtual and face-to-face communities, such as flashmobs and Hiptop Nation, smartmobs - using mobile technologies to enhance their cohesion and efficacy. pedagogies for the m-learning world - decline of the lab and the rise of the multiconfigurable class. - m-learning bringing capability to the classroom - increase in blended or hybrid learning as Internet access and collaborative learning are enhanced by m-learning.

UNIT 5 : Emergent Cultural Trends : Cyberinfrastructure availability to any m-learner - any point in space and time augmented reality. The geolocation of Web documents The Dutch GIPSY Project - "Archaeological Walk in Nijmegen," - The physical vs. the digital, the sedentary vs. the nomadic—the wireless, mobile, student-owned learning impulse cuts across our institutional sectors, silos, and expertise-propagation structures.

# **TEXT BOOKS**

1. Jochen Schiller, "Mobile Communications", PHI/Pearson Education, Second Edition, 2003. (Unit I Chap 1,2 &3- Unit II chap 4,5 &6-Unit III Chap 7.Unit IV Chap 8- Unit V Chap 9&10.)
2. William Stallings, "Wireless Communications and Networks", PHI/Pearson Education, 2002. (Unit I Chapter – 7&10-Unit II Chap 9)

## **REFERENCES**

- 1. Kaveh Pahlavan, Prasanth Krishnamoorthy, "Principles of Wireless Networks", PHI/Pearson Education, 2003.
- 2. Uwe Hansmann, Lothar Merk, Martin S. Nicklons and Thomas Stober, "Principles of Mobile Computing", Springer, New York, 2003.
- 3. Hazysztof Wesolowshi, "Mobile Communication Systems", John Wiley and Sons Ltd, 2002.
- 4. Bryan Alexander, "Going Nomadic: Mobile Learning in Higher Education", 2004, EDUCAUSE Review, vol. 39, no. 5 (September/October 2004): 28–35.

# ELEM 524: PROJECT -4

1.DISSERTATION and VIVA OR

2.Media Production (5 to 15 minutes) on Short-film / Documentary/Animation Movie/TV Advertisement/ TV play/Telefilm/Music video/ with single camera production and VIVA

Each production should be accompanied with the details of script, story board and the production plan. The plan should be presented to the expert committee/ faculty / BOS which comprises of media experts from DD/ AIR/ EMMRCs, at the beginning of fourth semester.

# Qualification for Faculty in teaching M.Sc. Electronic Media Programme

Essential: as per UGC Norms

Eligibility: A masters degree in Electronic Media/Mass Communication/Fine Arts and Visual Arts and Performing Arts, with 55 percentage and should have cleared UGC NET Lectureship. Or Ph.D in the related areas.

Desirable: Professional Courses from Film Institute, Chennai, Calcutta and Pune., NID, Ahmedabad, M.Des(Visual Communication/Animation)ICT-IIT, Mumbai, Visual Arts(MFA/MVA - Photography/Applied Art/Graphics/Painting and Communication Arts. Industrial Experience in the areas of Filmmaking/TV/Theatre/Radio/Sound/ Post Production/Web Designing/Animation.