Masters in Multimedia Design (MDes)

STUDY PLAN AND SEQUENCE OF COURSES AND COURSE ABSTRACTS

**Semester 1**

**SEEING: COMMUNICATION AS A CULTURAL, AESTHETIC AND TECHNICAL EVENT.**
This segment of the program is to provide individuals with a theoretical framework to understand the multiple aspects of communication. The theoretical frameworks will be drawn from diverse disciplines primarily based in Social Sciences and Humanities. The structuring principle is image and how it is perceived leading to how the image is shown.

**Visual Language and Culture (PC 701)**
Course Credit: 1- 1- 2- 3

**Lecture Sequence: CULTURE COMMUNICATION AND VISUALITY**

This sequence of lecture will introduce the role of culture/cultures in organizing the expressive, technical and emotional aspects of communication using multiple mediums. Ethnographic analysis from range of contexts would be drawn upon to analyze the intent and impact of communication as an event. The particular emphasis would be how idea of seeing and showing is significant in a society and history. The driving idea is to question why “seeing is believing”?

**Seminar/discussion Segment: PRINCIPLES OF SEMIOTICS AND COMMUNICATION**

Basic writings of Barthes, Pierce, Eco and Goffman would be considered to create an analytical framework of semiotics that is used for communicating and understanding ideology and mythology as a transformational process in society. Advertisement and media would be used to draw upon as possible case studies.

**Studio/Lab Units: DRAWING AND COMPOSITION**
The basic thrust of the course would be to provide student with basic sensibility of observing (multiple dimensions) and transferring the observations into something that can be shown effectively in two dimensions i.e. the screens of various sorts without distortions and enhancing the dimensions that are restricted by the two dimensionality. This course would enable the students with the required skills of observation, synthesis, recording and representation.

Introduction to Media & Communication (PC 702)
Course Credit: 1-1-2-3

Lecture Sequence: AESTHETICS AND MEDIUM MULTIPLICITY

Starting with the ideas such as Rasa the students would be given orientation to classical theories of Aesthetics covering Western and Oriental philosophies. It would raise the possibility of how ‘taste’ has today become a reflexive category as well as intercultural and technologically translatable category that conditions communication events. The course will provide the basis for student to grasp the role of communication where culture is comoditized as well as objectified. It would also set up the basic ideas of form and content, structure and function, part and whole, abstract and concrete, drawing particularly from the role of materiality of culture in variable contexts, specially within South Asian context.

Seminar/discussion Segment: EVENTS, EXHIBITIONS AND OBJECTS

Students would be provided with range of techniques that facilitate the process of eliciting ‘native exegesis’ and how they link to objects that are concrete embodiments of vision. In a way it would provide the students with capacity to conceptualize autobiography of person related with biography of objects and how that historiography problems could be transcended by multimedia. Primarily using writing and drawing, and photography.

Studio/Lab Units: WHAT IS GRAPHIC DESIGN AND BASIC GRAPHIC SOFTWARE

This course would introduce various graphic design principles such as gestalt laws, balance, harmony, rhythm and contrast, typographic considerations and the concept of graphic composition, understanding of colour and texture for electronic as well as traditional publishing and would impart the required skills of different graphic design software and introduce the possible applications of such software. Students would be provided with a chance to use and apply combination of diverse graphic software.
Introduction to Visual Communication and Interface (PC 703)
Course Credit: 1- 0- 4- 3

Lecture Sequence: Word and Image

This is a short introduction to hermeneutics and interpretation, especially as related in context of post-modernism, literary criticism, cultural studies and its impact on multimedia presentations. These lectures will provide the students with the capacity to question the distinction between presentation and representation as issues that can be dealt with visuality and the digital worldview.

Seminar/discussion Segment: Basics of Visual Design

Considering the role of photographic reporting and storytelling discussions will provide an overview of photojournalism, history, theory and ethics. Students will explore skills and strategies used by newspaper, magazine and on-line photographers and editors and challenge students to deal responsibly with issues of invasion of privacy, subject representation, copyright and fair use, and image manipulation.

Studio/Lab Units: Photography and Photographs

This segment would introduce the understanding and skills for basic Photography (taking a picture, brief history of photography, types of camera, purpose of photography, photographic process, appreciation of photographic images. Aspects of camera and lens’, film, exposure and filters and how the relate to aspects of light will be presented to the students. Students will be further provided with skills required in a dark room context including film processing and printing. Understanding of standard photography will then be utilized to provide the students with how and why of “Digital Photography” Particular emphasis would be given to color modes, image resolutions and extensions for various outputs, image sensors, and memory cards By demonstration and practical application students would learn to use Photoshop tools. Conduct basic image editing operations with an understanding of vector and bitmap graphics, file formats, color modes and image resolutions. Consideration would be given to manipulation of image and special effects.
Image Processing and Application (PC 704)
Course Credit: 1- 0- 4- 3

Lecture Sequence: Image Processing and Computation

This segment would introduce the concepts behind understanding a digital image and associated processing from the computation perspective, the basic terminology of image processing and parameters that are related such as resolution, water marking, compression and aspect ratio. This would also introduce the understanding of computational requirements and terminology related to digital image processing and its applications in multimedia.

Seminar/discussion Segment: Web Design and Interconnectibility

Through discussing various examples students would be introduced to Web Concepts and Design. What are the basic technical requirements and production processes needed for a basic web site development and construction. Topics include site design, image processing, visual web editors, html and layout, interface design and basic behaviors. Along with this aspects of connecting to a network would be provided as a hands on experience. As a class project, students would start setting up a site that would become a context to apply things they learn and present the work for others.

Studio/Lab Units: Image Processing Software

This course will introduce the students to two-dimensional digital images. This will include editing and processing software, input/output devices (such as scanners and writing tablets) and image creation and editing. The course emphasizes the tools for the production of images for multimedia applications and stills for moving images. Implications of basic perception and visual principles are important and would be presented to students. The theoretical inputs would include: color theory, form perception, depth perception, motion, perspective and illusions.
Communication through Composed Images (PC 705)
Course Credit: 1- 0- 4- 3

Lecture Sequence: Concepts And Foundations of Multimedia – Site and Sights

This segment would introduce the students to the concepts and foundations of Multi Media. This would cover: an introduction to the historical contexts, concepts, technical concerns and production processes fundamental to Multi Media. Discussion topics would include history of multi media, desktop computing and publishing, communication theory, issues of design and interactivity, hardware and computer science foundations of multi media. Concepts and ideas related to digital art, web design, video and sound production. The segment would provide students with a foundation understanding of the historical, current and future status of the Internet and multimedia information systems and Emerging Technologies.
The students would have to conduct Surveys in current and historical scholarship and criticism of Multi Media and its antecedents.

Seminar/discussion Segment: Introduction to Film-making

This course introduces the students to the grammar of film language and the basic concepts of filmmaking. The history of films: starting with early projection systems to the latest in special effects is used as a context to understand the grammar and language of films. The students are sensitized to what is a good film and how to read and dissect a film shot by shot. The basics of film language is then practically used with the students undergoing a series of exercises like POV, continuity, time and space before graduating to writing a complete script and then a screenplay and a storyboard.

Studio/Lab Units: Video Planning And Production – Storyboard to Screen

Continuing from the earlier section, the students are exposed to the various practicalities of film-making, the concept of frame and framing, camera movement and depth in space, types of Cameras and Tape Formats, camera accessories and camera handling, grammar of edit and the various software that allow Non-Linear Editing, effects software and there applications, lighting for video and how to handle actors. The complete process of visualization of a film is then tested out with the students scripting, storyboarding, shooting and editing a short film – either a promotional video, a short fiction film or a documentary.
Introduction to Sound (PC 706)
Course Credit: 2 - 0- 2- 3

Lecture Sequence: SOUND AND CULTURE

Students would apply the semiotics to distinguish between sound, noise and music particularly in the globalized context and explore the connection between sound and image.
Survey of the principal forms of digital music in use today: MIDI, multi-track digital recording, sampling, digital sound synthesis, digital sound editing and digital music notation.

Seminar/discussion Segment: AUDIO CODING AND PROCESSES

The course would introduce audio production, sound recorders, functions and applications of various different microphones. Various formats of recording and processing such as Audio Tape and Digital Recording will be considered. Students would be presented with the question, how to bring together recordings from studio and field by editing? Aspects of mixing would be presented as problems as well as solutions. The students would acquire skills related to Mixing Boards, and related software and Digital applications. At the end of the segment, the student must be comfortable with recording and editing techniques and should have good working knowledge in various Digital sound Formats (Like WAV and MIDI).

Studio/Lab Units: EDITING FOR MULTIMEDIA

Students will take up individual sound recording exercise, to compose a structured 'musical pattern'. The recording of what is regarded as noise would be treated with range of software dealing with sound and studio techniques to create and transform 'noise' into 'music'. This exercise will be further complimented by the

SEMESTER 2.
SEEING AND SHOWING: MEDIUM TRANSFORMATIONS IMAGES THAT ‘SPEAK’
Building further on the sense of seeing and visuality- the second term will focus on the communication that is heard or based on sound. It will sensitize the students to issues of music, sound and noise as categories of culture and how the various technologies are involved and utilized in manipulating, transforming and recording it. The basic idea will be to integrate the communicability by combining sight and sound and how this combination generates the potential of a multi-media environment in which other human sense come into interplay.

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students studying and combining aspects of editing that blends image patterns and sound structures together.

**Multimedia Concepts and Concerns (PC 707)**

Course Credit: 1- 0- 4- 3

**Lecture Sequence: Multimedia And Software**

This segment introduces to the students the various combinations of software that are available and that must be utilized to create a multimedia content. As each multimedia approach requires a different combination of software the students need to understand the potential advantage and disadvantages of each special software, their compatibility amongst each other, cross-platform applications and the optimum manner in which they can be used with minimum generation-loss of end product. This section also deals with the hardware-software compatibility for the optimum possible result.

**Seminar/discussion Segment: Issues in Sound and Event Programming**

Students will be introduced to the concept of how to record, produce, and transmit different qualities of sound based on the final requirement that is, whether it is a stage performance, open air performance, indoor transmission, sound for radio show, sound for audio encoding sound for multimedia application (information kiosks, websites, CD-ROMs etc). Keeping this in mind the space within which the sounds will be used and perceived design and technologies have to be carefully selected. Students will be introduced to hardware and the technologies that are available for recording, editing and playback and their compatibility.

**Studio/Lab Units: Advanced Multimedia Software**

This will be a hands-on, lab-based exploration of multimedia fundamentals. Emphasis will be on the design, concept development and collaborative techniques as used in professional multimedia prototyping. Additionally, students will learn about a variety of hardware and software options including, but not limited to, image editing, digital video and input/output concerns. This course will consider the concepts, technical requirements and production processes needed for web site development and construction. Topics covered will include interface design, web animation and interactivity, video and audio for the web and interactive end products. Primary objective is to present and explore concepts and tools for interactivity in multimedia.
**Information Design and Multimedia (PC 708)**

Course Credit: 2- 0- 2- 3

Lecture Sequence: **INFORMATION SYSTEM AND ARCHITECTURE**

The segment introduces the basic elements, principles, processes and theory of information design for Multi Media and provides an overview of the fundamental methods, mechanics, and technologies relative to the discipline using the computer as a creative and professional tool. The course would Focus is on process, and creative problem solving along with an exploration of basic conceptual skills. Issues unique to Multimedia will be addressed along with related critical, design and aesthetic concerns.

**Seminar/discussion Segment: NETWORK, PRINCIPLES, PROTOCOLS AND USABILITY**

The course would introduce advanced strategies for researching and analyzing communication problems in the workplace and for adapting electronic documents (including multimedia publications) to a multiple audience. Each student will undertake a communication project resulting in a professionally created, electronically published prototype that satisfies the available network and protocols for a selected audience.

**Studio/Lab Units: USER ANALYSIS AND INTERFACE DESIGN**

The course would explore intermediate and advanced topics in multimedia production and design, including, usability principles and requirements, visual and other interfaces and parameters of multi media publication to be a useful medium of communication. The course has been designed to provide students with a deeper and more sophisticated experience with a multimedia issue, tool, or skill—or combination of all three.

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**Information Systems and Media Environment (PC 709)**

Course Credit: 1- 1- 2- 3

Lecture Sequence: **MANAGEMENT OF INFORMATION SYSTEM**

Some of the topics covered in this course are to introduce students to structural aspects of an Information System. What concepts are behind traditional and modern techniques of information systems. Lecture will connect general systems theory to management of Information System. By considering the information structure and its attributes— we will consider issue of change of
meaning in changing context. The course will facilitate the process of visualization of information system and implicit metaphors. The lecture sequence will raise the problems of multimedia database and related issues of structure and operations of search engines.

Seminar/discussion Segment: Programming To Produce and Deliver

This course would discuss various issues related to the understanding of an operating system and its' functions. This would introduce a working concept of programs and program structures. Students will acquire understanding of the possibilities of programming related to multimedia. How one can use a program to synchronize hardware and multimedia outputs, as well as possibility of generating a program for specific tasks related to multimedia production and delivery.

Studio/Lab Units: Designing Information Management System

In the studio segment the students would take up an individual or a group project related to conceptual structuring of a database and explore the possibilities of creating an Information Management System and multimedia archival.

Issues in Multimedia Production (CS 710)
Course Credit: 1-1-2-3

Lecture Sequence: Hardware For Multimedia

Covers the fundamentals of digital imaging, including the acquisition, correction and editing of Images with various software. Understanding of various image input and output devices and their functions. Understanding of compatibility between various devices and calibration for an intended result.

Seminar/discussion Segment: Hardware Abilities and Capacities for Multimedia

This segment will consider the issues and themes connected with range of hardware needed for production and delivery of multimedia packages, introduction to a range of current and possible technologies; multimedia applications and required hardware, such as hardware required for an Audio Visual presentation or digital exhibitions.

Studio/Lab Units: Audio and Visual CD
Students will incorporate and apply the aspects learned in the above two segments with specific reference to digital image and create products (on CDs) that would embody diverse audio and visual capabilities, in order to understand robustness of the ‘form’ and ‘content’.

**SEMIESTER 3**

**PUTTING TOGETHER MEDIUMS TO CREATE COMMUNICATION.**

This unit is primarily focused on assisting individual student in identifying a communication event or context that the student will analyze and proceed to develop a designed communication solution that uses technical skills and cultural sensibility. Thinking, identifying, analyzing and coming up with an alternative is the main thrust for the teaching and learning in the third term. Various modules will emphasize on the integration of the aspects presented in previous two terms to think about what is seen, what is heard and what is written and what is read to relate with the aspect of what can be communicated by multiplicity of media.

NOTE: Each student at this stage must have a study committee that supervises the progress and advises the student in their course of study. An official committee form must be signed by three faculty members, of student's choice and must be officially submitted.

**Open Elective(s)**

Course Credit: 3 for each of the electives, 6 credits for two electives chosen

Each student will select two (2) Open Electives available at the institute. As range of Open Electives vary from year to year students will be advised to take up courses that enhance their technical back ground or provide a chance to acquire deeper understanding of a topic. Consent of the instructor conducting the Open Elective is mandatory for each student.

**Study of Contemporary Media (PC 711)**

Course Credit: 5-0-0-5

Seminar/discussion Segment: **CONTEMPORARY TOPICS IN WRITING, INSCRIBING AND BURNING**

Students in this seminar will be expected to participate as a group to formulate their topic of research and focus for the final project. This seminar intends to draw upon the previous course material and aptitudes and interests of each individual to formulate a problem for study. Based on the individuals interest the seminar will
provide a platform for thinking and planning the home work and strategies required for solving the problem formulated through the seminar sessions. For instance what kind of story board is required, what soft ware applications are anticipated, and more over who is going to benefit or will be the potential client, audience or stake holder of the form of communication that student proposes to design.

It is expected that individuals during the end of second term would start thinking about the potential fields they would like to explore for the final project due in fourth term.

**Media Assesment & Applicability (PC 712)**
Course Credit: 3-0-2-4

Seminar/discussion Segment: *Individual Project Proposals, Research and Planning*

Studio/Lab Units: *Planning and Identifying Resources and Techniques*

Students in this course will initiate the required studio work. This would facilitate the individual student projects in which theory and practice has to be combined by selecting appropriate techniques.

**Semester 4**

**FINAL SEMINAR PRESENTATION AND PROJECT**

This final unit of study is for the student to develop and present the project they have undertaken in order to qualify for the final degree. It is not only culmination of theory and practice as embodied in the students work, but also provide the student to be reflective and acquire the skill of dealing with actual presentation of ideas, talking about it, making an argument and convincing others. After all it is a situation they will have to deal eventually every day in the professional world. It is to provide the student with a chance to communicate well about what they want to communicate with there designed communication product.

(Under supervision of each individual students committee)

Students meet in a weekly seminar to discuss progress. Each defines and researches his or her own individual project, presents it within the format of the seminar, and brings it to fruition as a new media publication, such as a website; animated, feature or documentary video; or other digital production.

Students who organize 'Industrial placement' will be allowed to proceed to the on site work but they must finish all the formalities and paper work so that they can proceed to take up the project. They will be expected to return in the last 15 days
of the term after finishing about 12 weeks placement assignment. Upon returning they will be expected to make a formal presentation as outlined below.

**MDes Project (PC 714)**
Course Credit: 0- 0- 30- 15

**PRESENTATION OF THE FINAL PROJECT IN THE SEMINAR.**

**PROCEDURE:**
It is expected that the individual student will work on their own with guidance from the research committee. Consultation with the committee members is essential for avoiding the situation in final analysis where no body but the student alone is responsible for the poor quality of work leading to failure in the last module. The last module will culminate into the seminar presentation where the students committee has to be present.

This seminar **MUST** be scheduled and held before the last week of the term. It will be student's responsibility to organize the final seminar date.

Each student will have to organize individual presentation for the study committee and be engaged in a discussion after the individual presentation is made. This session would be open to the whole institution and subject to evaluation.

The committee members will evaluate the final product and it's presentation and asks for the two copies of CD as well as a document on the project itself. Committee members may invite individuals or individual specially to assist in the evaluation of the student work from within the institute or out- side of the institute.

Document must be made available to committee members prior to the seminar. If the final assessment requires that student makes some alterations to the final project, the committee would set up the dead line by which the revisions must be made by the student. This would be required for the student to earn the final degree.

**Suggested outline for what the presentation should include**
Identification of the communication event or the need of communication.
How multimedia is utilized
Aspects of designed communication
Technology as combined to create the desired communication
Presentation of the final product in form of a CD