Yashwantrao Chavhan Maharashtra Open University, Nashik

School of Continuing Education

Syllabus

of

B Sc Media Graphics & Animation

Programme Code: T97

BMG 101: Introduction to Computers and Internet

UNIT 1: INTRODUCTION TO COMPUTERS

1.0 Before We Begin
1.1 Unit Objectives
1.2 What is a computer?
1.3 What makes a computer powerful?
1.3.1 Speed:
1.3.2 Reliability:
1.3.3 Accuracy
1.3.4 Storage
1.3.5 Diligence
1.3.6 Versatility
1.3.7 Power of Remembering
1.3.8 No “intelligence”
1.3.9 No Feelings
1.4 THE HISTORY OF COMPUTERS
1.4.1 Types of calculating Machines
1.4.2 Napier’s Bones
1.4.3 Slide Rule
1.4.4 Pascal’s adding & subtracting machines
1.4.5 Leibniz’s multiplication and division machines
1.4.6 Babbage’s analytical engine
1.4.7 Mechanical calculator
1.5 Electrical Calculator
1.5.1 Modern Electronic Calculator
1.6 Computer Generations
1.6.1 First generation computers (1939-1954): Vacuum Tube
1.6.2 Second generation computers (1954-1959): Transistors:
1.6.3 Third generation computers (1959-1971): IC
1.6.4 Fourth generation (1939-1954): Microprocessors
1.6.5 Fifth generation computers (1991 & beyond)
1.7 Types of Computers
1.8 Workstations
1.9 Mainframe
1.9.1 Differences between Mainframe and supercomputers
1.9.2 Characteristics of Mainframe
1.10 Supercomputer
1.11 Servers
Hardware requirement
1.12 Summary
1.13 Key Terms
1.14 End Questions
1.15 References

UNIT 2: COMPUTER ORGANIZATION

UNIT 3: SOFTWARE APPLICATIONS

UNIT 4: INPUT TO COMPUTERS

UNIT 5 DATA PROCESSING

UNIT 6: OUTPUT DEVICES

UNIT 7: DATA STORAGE

Unit 8: Internet Basics

UNIT 9: THE STUDY OF THE INTERNET

UNIT 10: MICROSOFT WORD XP 2007

Course: BMG 102: DRAWING & SKETCHING

Unit 1 : Introduction To Drawing

Introduction
1.1 Unit objectives
1.2 Introduction To Drawing
1.3 How To Draw
1.4 How To Choose A Pencil
1.5 How To Improve Your Drawing Skills
1.6 How To Ink A Drawing
1.7 How To Sketch
1.8 Summary
1.9 Key Terms
1.10 End Questions

Unit 2 : Drawing Shapes and Forms

2.0 Introduction
2.1 Unit Objectives
2.2 Shape And Forms
2.3 How to draw a Box
2.4 How to draw a circle
2.5 How to draw a cylinder
2.6 How to draw a hexagon
2.7 How to draw a perfect pentagram
2.8 How to draw octagonal based pyramid
2.9 How to draw cartoon car
2.10 How to draw a simple house
2.11 Summary
2.12 Key terms
2.13 End Question

Unit 3 : Drawing Text and Lettering

3.0 Introduction
3.1 Unit Objectives
3.2 How to Draw 3D Block Letters
3.4 How to Make an Ambigram
3.4.1 Types of Ambigram
3.4.2 Steps for Drawing an Ambigram
3.5 How to Have Beautiful writing
3.6 How to Improve Your Calligraphy Writing
3.7 How to Design a Logo
3.7.1 Principles of Effective Logo Design
3.7.2 Designing a Logo
3.8 Summary
3.9 Key Terms
3.10 End Questions
3.11 Further Reading

Unit 4 : Drawing Realistic and Cartoon Characters

Unit 5 : Drawing Animals

Unit 6 : Cartoon and Comic Drawing

Unit 7 : Perspective Drawing

Course: BMG 103: Colour Theory

UNIT 1 : COLOUR THEORY: OVERVIEW

UNIT 2 : COLOUR BASICS

UNIT 3 : COLOUR HARMONY

UNIT 4 : COLOUR MEANINGS

UNIT 5 : COLOUR MODEL

UNIT 6 : PSYCHOLOGY OF COLOUR

Course: BMG 104 : TYPOGRAPHY

UNIT 1 : TYPE TECHNOLOGY HISTORY AND EMERGENCE

1.0 Introduction
1.1 Unit objectives
1.2 History of Type Technology- The Four Revolutions
1.2.1 Mosaic Form
1.2.2 Gutenberg (ca. 1450-1480) & The Impact of Printing)
1.2.3 Industrial Revolution Steam, Line-casting & Automated Punch-cutting (start 1870-95; end 1950-65)
1.2.3 Photocomposition (Intertype et. al., start 1950-60, end 1975-85)
1.2.4 Digital (start 1973-83)
1.3 Introduction To Typefaces
1.4 Classification of Typefaces
1.4.1 Serif Type Styles - Old Style
1.4.2 Serif Type Styles - Transitional
1.4.3 Serif Type Styles - Modern
1.4.4 Serifs - Slab Serif
1.4.5 Decorative & Display Fonts
1.4.6 Script, brush & Freehand Fonts
1.4.7 Dingbat
1.5 Early Letterform
1.6 Summary
1.7 Key Terms
1.8 End Questions

UNIT 2 : TYPOGRAPHY

2.0 Introduction
2.1 Unit objectives
2.2 Typography Through The Ages
2.3 Concepts In Typography
2.4 Typographic Building Blocks
2.5 Elements of Font
2.6 Key Typographic Terms
2.7 For Choosing Typefaces
2.8 Summary
2.9 Key Terms
2.10 End Questions

UNIT 3 : TYPOGRAPHIC DESIGN CONSIDERATION

3.0 Introduction
3.1 Unit objectives
3.2 Typographic measurements
3.3 Hanging punctuation
3.4 Ligatures
3.5 Typographic hierarchy- size
3.6 Typographic hierarchy- weight
3.7 Steps to achieve Typographical hierarchy
3.8 Summery
3.9 Key terms

UNIT 4 : IN-DESIGNS TUTORIAL FOR TYPOGRAPHIC DESIGNS

UNIT 5 : COPY PREPARATION DESIGN & LAYOUT

UNIT 6 : FILE AND FONT FORMATS

Course: BMG 105 :Computer Graphics Part I Adobe Photoshop

UNIT 1 : PHOTOSHOP INTRODUCTION

1.0 Introduction
1.1 Objectives
1.2 Image Design Evolution from Ages
1.3 Art Forms and Styles
1.4 What is Photoshop
1.5 RGB Colour space
1.6 Digital Image Types Vector and Bitmaps
1.7 Internet image standards
1.8 Summary
1.9 Key Terms

UNIT 2 : PHOTOSHOP WORKSPACE

2.0Introduction
2.1 Objectives
2.2 The Photoshop Workspace
2.3 Preferences
2.3 Summary
2.4 Key Terms
2.5 End Questions

UNIT 3 : CREATING IMAGES

3.0 Introduction
3.1 Objectives
3.2 Creating New Images
3.3 Bridge
3.4 Image Resizing: Magnification and Reduction
3.5 Scanning Image into Photoshop
3.6 Importing Images
3.7 History Palette
3.8 Taking Snapshot
3.9 Summary
3.10 Key Terms
3.11 End Questions

UNIT 4 : CREATING AND USING SELECTIONS

4.1 Selections and Channels
4.2 Multiple Selections
4.3 Modifying Selections
4.4 The Info Palette
4.5 Moving Selections

UNIT 5 : PHOTOSHOP'S LAYERS

UNIT 6 : EDITING IMAGES

UNIT 7 : EDITING VECTOR SHAPES

UNIT 8 : CREATING STATIC IMAGES

Course: BMG 106: Computer Graphics Part-II: Adobe Illustrator

UNIT 1 UNDERSTANDING ILLUSTRATOR

UNIT 2 CREATING DOCUMENTS

UNIT 3 : DRAW WITH THE PENCIL AND BRUSH TOOLS

UNIT 4 : DRAW WITH THE PEN TOOL

UNIT 5 : WORK WITH SHAPES

UNIT 6 : SCALE, SKEW AND ROTATE

UNIT 7 : TEXT FORMATTING

UNIT 8 : IMPORT WORK

UNIT 9 : FILTERS AND EFFECTS

Course: BMG 107 : TECHNICAL AND CREATIVE WRITING

UNIT 1 : ESSENTIAL GRAMMAR

UNIT 2 : BUSINESS CORRESPONDENCE AND APPLICATION LETTERS

UNIT 3 : BOOK DESIGN

UNIT 4 : TECHNICAL WRITING

UNIT 5 : CREATIVE WRITING

UNIT 6 : CREATIVE WRITING PROCESS

Course: BMG 108 : INTRODUCTION TO MULTIMEDIA

UNIT 1 : INTRODUCTION TO MULTIMEDIA SYSTEM

UNIT 2 : MULTIMEDIA SYSTEM AND APPLICATIONS

UNIT 3 : COMPUTER GRAPHICS

UNIT 4 : COMPUTER ANIMATION

UNIT 5 : INTERACTIVE MEDIA

UNIT 6 : MULTIMEDIA HARDWARE

UNIT 7 : MULTIMEDIA IN EDUCATION

UNIT 8 : MULTIMEDIA AND VIRTUAL REALITY

UNIT 9 : MULTIMEDIA: APPLICATION AND FUTURE

Course: BMG 109: Developing Presentation

UNIT 1 : DELIVERING PRESENTATION

UNIT 2 : VISUAL PRESENTATION

UNIT 3 : KNOWING PROJECTORS

UNIT 4 : INTRODUCTION TO POWERPOINT

UNIT 5 : BASICS OF POWERPOINT IMAGES

UNIT 6 : MAKING POWERPOINT SLIDES

UNIT 7 : ENTERING TEXT IN A POWERPOINT SLIDE

UNIT 8 : VIEWING YOUR POWERPOINT SHOW

Course: BMG 110 : DESIGN PRINCIPLES

UNIT 1 : THE PRINCIPLES OF UNIVERSAL DESIGN

UNIT 2 : PRINCIPLES OF GOOD GUI DESIGN

UNIT 3: COMPOSITION AND DESIGN

UNIT 4 : CREATIVE THINKING TECHNIQUES

UNIT 5 : TEACHING CREATIVITY

UNIT 6 : DESIGN METHODS

Course: BMG 111: Print Media–I: CorelDraw

UNIT 1 : OBJECT OVERVIEW

1.0 Introduction
1.1 Unit Objectives
1.2 Working With Coreldraw
1.2.1 Opening CorelDRAW
1.2.2 Main Window of CorelDRAW
1.2.3 Creating New Drawing File
1.2.3 Creating New Drawing File
1.2.4 Menu:
1.2.5 Dockers Overview
1.2.6 Toolbars
1.2.6.1 Pick tool overview
1.2.7 Saving a Drawing File
1.2.8 Opening an Existing Drawing File
1.2.9 Closing the File
1.2.10 Quitting/Closing CorelDRAW
1.3 Creating Different Objects
1.3.1 Creating Basic Drawings
1.3.2 Creating Lines and Curves
1.4 Zooming And Panning:
1.5 Setting View Modes
1.6 Working With Wireframe View
1.7 Working With Page Layout
1.8 Printing Drawings
1.8.1 Printer Setting
1.8.2 Print Preview
1.8.3 Print
1.9 Hints For Learning Coreldraw
1.10 Summery 1.11 Key Terms
1.12 End Question
1.13 Project

UNIT 2 : TOOLS

2.0 Introduction
2.1 Unit Objectives
2.2 Selecting objects
2.3 Cut, Copy or Duplicate an object
2.4 Copy Object Properties
2.5 Moving Objects
2.6 Align the object
2.7 Distribute objects
2.8 Group and Ungroup Objects
2.9 Changing Object Order
2.10 Undo Redo Revert Commands
2.11 Transforming Objects
2.12 Working with shapes

UNIT 3 : FILL TOOL

UNIT 4 : PATTERN FILL

UNIT 5 : TEXT TOOL

UNIT 6 : VECTORS AND BITMAP

UNIT 7 : IMPORT AND EXPORT

Course: BMG 112: Print Media Part-II: QuarkXPress

UNIT 1 : INTRODUCTION TO QUARKXPRESS

UNIT 2 : SETTING UP QUARKXPRESS PREFERENCES: PART ONE

UNIT 3 : SETTING UP QUARKXPRESS PREFERENCES: PART TWO

UNIT 4 : IMAGES WITH EMBEDDED CLIPPING PATHS

UNIT 5 :CREATING PAGE ELEMENTS

UNIT 6 : RECOVERING AND PREVENTING DATA LOSS

UNIT 7 : APPENDING HYPHENATION AND JUSTIFICATION

UNIT 8 : STROKED TEXTS

UNIT 9 : WORKING WITH EPS FILES

UNIT 10 : WEB LAYOUT

Course: BMG – 201: Introduction to Web Development

UNIT 1 : WEB DEVELOPMENT PROCESS

UNIT 2 : SITE DESIGN

UNIT 3 : IMAGES

UNIT 4 : ISSUES IN WEBSITE DESIGNING

UNIT 5 : THE BASICS OF NAVIGATION

UNIT 6 : WEB TYPE

UNIT 7 : CLIENT- SERVER ARCHITECTURE

UNIT 8 : INTRODUCTION TO E-COMMERCE

UNIT 9 : WEB SERVICES

UNIT 10 : WEB ADVERTISING

Course: BMG 202: HTML

UNIT 1 : INTRODUCTION TO HTML

1.0 Introduction
1.1 Unit Objectives
1.2 HTML Introduction
1.2.1 HTML and World Wide Web
1.2.2 Delivery Mechanism of HTML document on World Wide Web
1.3 Linear Media
1.4 Hypermedia
1.5 HTML Markus
1.6 Document Structure
1.6.1 HTML tags
1.7 A Basic Document
1.7.1 Special Characters
1.8 Home Page
1.9 Summary
1.10 Key Terms
1.11 Questions and Exercises
1.12 Further Reading

UNIT 2 : OVERVIEW

1.0 Introduction
1.1 Unit Objectives
1.2 Choosing a Text Editor
1.3 Starting NotePad
1.4 Creating a basic starting document
1.4.1 Setting Document Properties
1.5 Color Codes
1.6 Document Defination
1.7 The Body Element
1.8 Text Color
1.9 Link
1.9.1 Vlink and Alink
1.10 Using Image Backgrounds
1.11 Previewing Your Work
1.12 Save and View Cycle
1.13 Summary
1.14 Key Terms
1.15 Questions and Exercises
1.16 Further Reading

UNIT 3 : CONTENT AND CHARACTER FORMATTING AND LISTS

3.0 Introduction
3.1 Unit Objectives
3.2 Headings
3.3 Paragraph ..
3.4 Breaks
 and Horizontal Rules <HR>
3.5 Address Element

UNIT 4 : IMAGES

UNIT 5 : LINKS

UNIT 6 : TABLE

UNIT 7 : FRAMES

UNIT 8 : FORMS

UNIT 9 : JAVA

UNIT 10 : ACTIVE X SUPPORT

UNIT 11 : ANIMATED PAGES

UNIT 12 : PAGE LAYOUT

UNIT 13 : CASCADING STYLE SHEET

Course: BMG 203: Introduction to Flash

UNIT 1 : INTRODUCTION TO FLASH

1.0 Introduction
1.1 Unit Objectives
1.2 Introduction to Adobe Flash CS6
1.2.1 New Features of Flash CS6
1.3 Using the Flash Interface
1.4 Creating a New Document
1.5 Changing Movie Properties
1.6 Flash Panels
1.7 Using the Movie Explorer
1.8 Summary
1.9 Key Terms
1.10 End Questions
1.11 Further Reading.

UNIT 2 : CRATING GRAPHICS IN FLASH

1.0 Introduction
2.1 Unit Objectives
2.2 Creating Graphics
2.2.1 Line Tool (N)
2.2.2 Pen Tool (O)
2.2.3 Oval Tool (O)
2.2.4 Rectangle and PolyStar Tool ®
2.2.5 Pencil Tool (Y)
2.2.6 Brush Tool (B)
2.2.7 Misc Tool
2.3 Using Color Effectively
2.4 Layering Flash Elements
2.5 Masking Content
2.6 Organizing Content in Flash
2.7 Reusing Graphics as Symbols
2.8 Summary
2.9 Key Terms
2.10 End Questions
2.11 Further Reading.

UNIT 3 : USING TEXT EFFECTIVELY IN FLASH

3.0 Introduction
3.1 Unit Objectives
3.2 Using Text Effectively
3.3 Using the Text Tool
3.3.1 Static Text
3.4 Anti-Aliasing Text
3.5 Embedded Fonts versus Device Fonts
3.6 Using Components in Flash
3.7 Building Forms in Flash
3.8 Summary

UNIT 4: FLASH ANIMATION

UNIT 5 : UNDERSTANDING MOVE CLIPS

UNIT 6 : ADDING SOUND AND VIDEO

UNIT 7 : PUBLISING FLASH MOVIES

UNIT 8 : NAVIGATING A MOVIE IN FLASH

Course: BMG 204: CONTENT DIGITIZATION

UNIT 1 : THE DIGITIZATION

UNIT 2 : CAPTURING VIDEO IN MOVIE MAKER 2

UNIT 3 : DIGITIZING SOUND

UNIT 4 : DIGITAL VIDEO CAPTURING

UNIT 5 : DIGITIZING FILE FORMATS

UNIT 6 : DIGITIZATION-SCANNING, OCR AND RE-KEYING

UNIT 7 : MICROFORM

UNIT 8 : RECOMMENDATION FOR MICROFILM DIGITIZATION

UNIT 9 : GIS AND SCANNING TECHNOLOGY

UNIT 10 : DIGITIZATION PROJECT MANAGEMENT

Course: BMG 205: Content Authoring on Web Using Adobe Dream Weaver

UNIT 1 : DREAMWEAVER WORKSPACE

UNIT 2 : CREATING WEB PAGES

UNIT 3 : USING TEXT

UNIT 4 : HYPERLINKS

UNIT 5 : USING GRAPHICS

UNIT 6 : WORKING WITH HTML TABLES

UNIT 7 : USING FRAMES

UNIT 8 : INTERACTIVE FORMS

UNIT 9 : BEHAVIOURS

UNIT 10 : HTML AND DREAMWEAVER

Course: BMG 206: Developing Dynamic Pages Using JavaScript & VB Script

UNIT 1 : JAVASCRIPT SYNTAX

1.0 Introduction
1.1 Unit Objectives
1.2 Origin of syntax and Script
1.3 Variables
1.4 Types of Basic Data
1.5 Operators and Functions
1.6 Control Structures
1.7 Objects and Exceptions
1.7.1 What are Objects?
1.7.2 The JavaScript Object Model
1.7.3 Using Properties
1.7.4 Using Methods
1.7.5 Creating Instances of Objects
1.8 Miscellaneous
1.9 Summary
1.10 Key Terms
1.11 Questions and Exercises
1.12 Further Reading

UNIT 2 : JAVASCRIPT AND HTML

1.0 Introduction
1.1 Unit Objectives
1.2 JavaScript and HTML
1.3 Basics
1.4 Dialogs
1.5 Variables
1.6 Arrays
1.7 Operators
1.8 Summary
1.9 Key Terms
1.10 Questions and Exercises
1.11 Further Reading

UNIT 3 : CONTROL FLOW

1.0 Introduction
1.1 Unit Objectives
1.2 JavaScript Programming Statements
1.3 If Condition
1.4 Switch Case
1.5 Loop Statements
1.5.1While Loop
1.5.2 For Loop
1.6 Function
1.7 Object-oriented JavaScript Programming

UNIT 4 : JAVA SCRIPT METHODS

UNIT 5 : FORMS

UNIT 6 : INTRODUCTION TO VB SCRIPT

UNIT 7 : VARIANT DATA TYPE, SUB TYPES, AND LITERALS

UNIT 8 : ARITHMETIC OPERATIONS

UNIT 9 : VARIBLE DECLARATION AND ASSIGNMENT STATEMENT

UNIT 10 : ARRAY DATA TYPE AND RELATED STATEMENTS

UNIT 11 : CONDITIONAL AND LOOP STATEMENTS

UNIT 12 : FUNCTION AND SUB PROCEDURES

Course: BMG 207: Video Production Basics

UNIT 1 HANDLING VIDEO CAMERA

1.0 Introduction
1.1 Unit Objectives
1.2 Video Camera Terminology
1.3 Planning
1.4 Camera Functions
1.5 Framing
1.6 Camera Moves
1.7 Video Camera Filters And Types Of Shots
1.8 Shooting Technique
1.9 Summary
1.10 Key Terms
1.11 End Questions

UNIT 2 VIDEO CAMERA FUNCTIONS

2.0 Introduction
2.1 Unit Objectives
2.2 Video Camera Focus
2.3 Video Camera Iris
2.4 Video Camera White Balance
2.5 Video Camera Viewfinder
2.6 Video Camera Shutter
2.7 Summary
2.8 Key Terms
2.9 End Questions

UNIT 3 : VIDEO CAMERA TRIPODS

3.0 Introduction
3.1 Unit Objectives
3.2 Tripods
3.3 Choosing A Tripod
3.4 Setting Up A Camera Tripod
3.5 How To Use A Tripod
3.6 Monopods
3.7 Summary
3.8 Key Terms
3.9 End Questions

UNIT 4 : CCU (CAMERA CONTROL UNIT) OPERATIONS

4.0 Introduction
4.1 Unit Objectives
4.2 Ccu (Camera Control Unit)
4.3 Vision Mixer
4.4 Making A Video Master Tape
4.5 How To Prepare A Tape For Editing

4.6 Slow Motion Replays
4.7 Shooting A Fireworks Video
4.8 Summary
4.9 Key Terms
4.10 End Questions

UNIT 5 : VIDEO CHROMA—GREEN SCREEN

5.0 Introduction
5.1 unit objectives
5.2 how to make a green screen
5.3 planning the studio setting
5.4 green screen material
5.5 lighting the green screen
5.6 using green screen footage
5.7 duplicating a person in the same frame
5.7.1 duplicating actors with a split-screen:
5.7.2 duplicating actors by keying
5.8 star trek transporter effect
5.9 How to blur part of an image.
5.10 How to create the star wars lightsaber effect"
5.11 summary
5.12 key terms
5.13 end questions

UNIT 6 : SHOOTING EVENTS

6.0 introduction
6.1 unit objectives
6.2 shooting interviews
6.3 interview shots
6.4 studio interview settings
6.5 mobile interviewing techniques
6.6 remote interviews
6.7 vox pops
6.8 recording sound for interviews
6.9 lighting for interviews
6.10 editing interviews
6.11 general tips for shooting interviews
6.12 shooting a wedding video
6.13 shooting a home video
6.14 summary
6.15 key terms
6.16 end questions

UNIT 7 : STREAMING VIDEO

7.0 Introduction
7.1 Unit Objectives
7.2 Creating Streaming Video
7.3 Streaming Video Servers
7.4 Streaming Formats
7.5 Summary

7.6 Key Terms
7.7 End Questions

UNIT 8 : INTRODUCTION TOVIDEO EDITING

8.0 introduction
8.1 unit objectives
8.2 video editing
8.3 editing methods
8.4 video editing terminology
8.5 linear editing (tape to tape)
8.6 assemble editing
8.7 insert editing
8.8 non-linear (digital) editing
8.9 editing software
8.10 video transitions
8.11 summary
8.12 key terms
8.13 end questions

UNIT 9 : EMBEDDING STREAMING VIDEO IN A WEB PAGE

9.0 Introduction
9.1 Unit Objectives
9.2 Code For Embedding A Video File
9.3 Streaming Video Files With Quicktime
9.4 Streaming Mpeg-4
9.5 Streaming Video Using Flash
9.6 Streaming Video Using Flash Media Server
9.7 Flash Video: Progressive Download
9.8 Streaming Video Using Windows Media
9.9 Summary
9.10 Key Terms
9.11 End Questions

UNIT 10 : VIDEO FORMATS

10.0 Introduction
10.1 Unit Objectives
10.2 8mm Video Format
10.3 Beta / Betamax Format
10.4 Dv Format
10.5 Hdtv
10.6 Flash Video Format
10.7 Mpeg Format
10.8 Quicktime
10.9 Vhs Format
10.11 Summary
10.12 Key Terms
10.13 End Questions

Course: BMG 208 : Story Boarding

UNIT 1 : INTRODUCTION TO HTML

UNIT 2 : CREATING2.0 INTRODUCTION

UNIT 3 : STORYBOARDING FOR MULTIMEDIA

UNIT 4 : INTERACTIVE STORYBOARDING

UNIT 5 : STORYBOARDING DESIGN PROCESS

UNIT 6 : STORYBOARD FOR WEBSITE DESIGN

UNIT 7 : STORYBOARD PRESENTATION

Course: BMG 209 : VISUAL COMMUNICATION

UNIT 1 : BASIC VISUAL ELEMENTS

UNIT 2 : ORAL AND VISUAL CULTURE : A DOMINANT FORM OF COMMUNICATION

UNIT 3 : CLASSICAL PHILOSOPHICAL THEORIES OF PERCEPTION

UNIT 4 : PHOTOGRAPHIC COMPOSITION

UNIT 5 : TYPES OF PHOTOGRAPHY

Course: BMG 210: Audio-Editing Sound Forge

UNIT 1: DIGITAL AUDIO

1.0 Introduction
1.1 Unit Objectives
1.2 What is Sound
1.2.1 Measuring Sound
1.2.2 Frequency
1.2.3 Decibel Exposure Time Guidelines
1.3 Analog and Digital Audio
1.3.1 Analog Audio
1.12 Digital Audio
1.3.3 File Size and Bandwidth
1.4 Compression
1.4.1 Lossless Audio Compression
1.4.2 Lossy Audio Compression
1.5 Summary
1.6 Key Terms
1.7 End Questions

UNIT 2 : DIGITAL AUDIO FORMATS

2.0 Introduction
2.1 Unit Objectives
2.2 Digital Audio Files
2.1.1 Streaming Audio
2.2.2 Posting an Audio on the Internet
2.3 Motion Picture Expert Group (MPEG) Audio
2.3.1 MPEG Proprietary Formats
2.3.2 Non-MPEG Proprietary Formats
2.4 Summary
2.5 Key Terms
2.6 End Questions

UNIT 3 : CREATING MP3 FILES

3.0 Introduction
3.1 Unit Objectives
3.2 Creating an MP3 File: Encoding
3.2.1 Bit-Rates
3.2.2 Sound Quality
3.2.3 Constant Bit-Rate Encoding
3.2.4 Variable Bit-Rate Encoding
3.2.5 Selecting the Best Bit-Rate
3.2.6 Verifying the Result
3.3 Summary
3.4 Key Terms
3.5 End Question

UNIT 4 : EDITING SOUND FILES

UNIT 5 : SOUND EDITING WITH AUDACITY

UNIT 6 : AUDACITY MENU

UNIT 7 : TOLLBAR AND TRACKS

UNIT 8 : WORKING ON SOUND FORGE

Course: BMG 211: Video-Editing Adobe Premiere

UNIT 1 : OVERVIEW OF ADOBE PREMIERE PRO

UNIT 2 : ADOBE PREMIERE TOOLS

UNIT 3 : ADOBE PREMIERE IMPORT AND EXPORT

UNIT 4 : AUDIO

UNIT 5 : TITLES IN ADOBE PREMIERE PRO

UNIT 6 : TRANSITIONS IN ADOBE PREMIERE

UNIT 7 : KEY FRAMES AND EFFECTS

UNIT 8 : SPECIAL EFFECT -STAR TREK TRANSPORTER EFFECT

Course :BMG 212: ADVANCE VIDEO EFFECTS

UNIT 1 : FINAL CUT PRO INTERFACE

1.0 Introdeuction
1.1 Unit Objectives
1.2 Overview Of The Fcp Interface
1.2.1 Working Of Interface
1.2.2 Working With Tabs And Tabbed Windows
1.2.3 Using Different Window Layouts
1.3 Understanding A Project And Project Settings
1.3.1 Industry Pipeline Or Workflow
1.3.2 Post-Production Pipeline
1.3.3 Understanding Projects, Clips And Sequences
1.3.4 Creating And Saving Projects
1.4 Importing And Working With Clips In The Browser Window
1.5 Viewer Controls In Final Cut Pro
1.6 Timeline And Canvas Windows
1.7 Summary
1.8 Key Terms
1.9 End Questions

UNIT 2 : ORGANISING MEDIA

2.0 Introduction
2.1 Unit Objectives
2.2 Unit Of Markers
2.3 Understanding Clip And Sequence Markers
2.4 Using Bins To Manage Your Clips
2.5 Using Labels
2.7 Summary
2.8 Key Terms
2.9 End Questions

UNIT 3 : TIMELINE

3.0 Introduction
3.1 Unit Objectives
3.2 An Introduction To The Layer System
3.3 Working With The Timeline
3.4 Displaying In The Timeline
3.5 Navigating The Timeline
3.6 Understanding A Storyboard
3.7 Summary
3.8 Key Terms
3.9 End Questions

UNIT 4 : CAPTURING AUDIO AND VIDEO

4.0 Introduction
4.1 Unit Objectives

Course: BMG 301: ANIMATION PRINCIPLES

UNIT 1: AN ANIMATOR'S JOB

1.0 Introduction
1.1 Unit Objectives
1.2 Zeal and Fervor for Animation
1.3 Animation studio:
1.3.1 Setting up one's own studio,
1.3.2 Projecting one's talent commercially
1.4 What an Animator does
1.4.1 Job description
1.4.2 Organization sizes. Small and big contractors and studios
1.4.22.1 A small contractor
1.4.2.2 A mid-sized contractor
1.4.2.3 A full-fledged studio of national if not international standing.
1.5 Workflows at an Animation Studio
1.5.1 Making a pitch for the work
1.5.1.1 The rough work
1.5.1.2 Planning the Poses
1.5.1.3 Expressive pose
1.5.2 Forming a contract
1.5.3 Creating a storyboard for the work at hand
1.5.4 Forming the objects, scenes and characters
1.5.5 Conceive the relevant motions
1.5.6 Testing
1.5.7 Rendering
1.5.8 Raising your invoice for the work done
1.6 Coaching and education in Animation
1.7 Employment Avenues in Animation
1.8 Summary of This Section
1.9 Important Terms
1.10 End Questions
1.11 Further reading

UNIT 2 : ACTIVITIES UNDER ANIMATION

2.0 Introduction
2.1 Unit Objectives
2.2 Computer Animation
2.2.1 Computer Animation as Animation
2.3 Conceptualization
2.3.1 Flow Chart
2.4 Storyboarding
2.4. l Request for Proposals
2.4.2 Production-stage Storyboard
2.4.3 Basic Descriptions of a Storyboard
2.4.4 Storyboard Procedure
2.4.5 Costs and Scalability
2.5 Client Presentation
2.5.1 Timing the Board

2.6 Rendering
2.6.1 Process of writing the script and getting approvals
2.6.2 Milestones
2.7 Setting a design for the scene
2.7.1 For an Exterior Scene
2.7.2 For An interior Hall
2.7.3 Acquiring relevant art material from the Client
2.7.4 Fleshing out the character's persona
2.8 Putting In Place Music, Sound Effects And Voice Artists
2.8.1 Choreographing movements
2.8.2 Keyframes
2.8.3 Motion Capture
2.9 Developing A Render Farm
2.10 Lip-synching of Characters
2.10.1 Voice Characterization
2.10.2 Track Reading
2.10.3 Animator as an Actor
2.11 Test Pass Rendering
2.12 Internet Distribution
2.13 Summary
2.14 Key Terms
2.15 End Questions
2.16 Further Reading

UNIT 3 : EQUIPMENT NECESSARY IN ANIMATION

3.0 Introduction
3.1 Unit Objectives
3.2 Equipment Obsolescence
3.3 Cost, Roi and Burn Rate
3.4 Basic Animation Computer
3.4.1 Choosing a Computer
3.5 Choosing Hardware
3.5.1 Hardware
3.6 Audio Creation
3.6.1 Stock Music
3.6.2 Recording Booth
3.6.3 Microphone
3.6.4 Headphones and Looping Tools
3.6.5 Live Looping
3.7 Role of Video In Animation Studio
3.7.1 NTSC Standard
3.7.2 Black and White Signal
3.7.3 Color Monitors and Gamma Correction
3.7.4 Incorporating Color into the B and W Signal
3.7.5 Video Tape Formats
3.7.6 Digital Video Formats
3.7.7 Components of Video Facility
3.7.8 Animation Recording System
3.7.9 Film Technology
3.8 Summery
3.9 Key Terms
3.10 End Questions

3.11 References

UNIT 4 : MAYA AND 3 DS MAX

4.0 Introduction
4.1 Unit Objectives
4.2 Common Elements
4.3 The 3ds Max
4.3.1 General Description of 3DS Max
4.3.2 Program Navigation in 3DS Max
4.3.3 View Navigation in 3DS Max
4.3 Autodesk Maya
4.3.4 Object Navigation in 3DS Max
4.3.5 Object Creation and Object Editing in 3DS Max
4.3.6 Layers in 3DS Max
4.3.7 3DS Max Track Bar
4.4 Summary of this section
4.4.1 General Description of Maya
4.4.2 Program Navigation and Layout
4.4.3 Shelf
4.4.4 View Navigation in Maya
4.4.5 Object Navigation in Maya
4.4.6 Object Creation and Object Editing in Maya
4.4.7 Layers in Maya
4.4.8 Time Slider and Range Slider in Maya
4.4.8.1 Creating a New Scene
4.4.8.2 Primitive objects
4.4.8.4 Toolbox: Layout shortcuts
4.4.8.5 Toolbox : Transformation Tools
4.4.8.6 Channel box
4.4.8.7 Duplicating Objects
4.4.8.8 Creating A Project
4.4.8.9 Save your work
4.5 Summary
4.6 Key terms
4.7 End Questions
4.8 Further Reading

Course: BMG 302 INTRODUCTIONS TO MAYA

UNIT 1 : USER INTERFACE

1.0 Introduction
1.1 Unit Objectives
1.2 Autodesk Maya Interface
1.2.1 The Title Bar
1.2.2 The Main Menu Bar
1.2.3 The Status Line
1.2.4 The Shelf / Shelves
1.2.5 The Toolbox
1.2.6 The Channel Box/Layer Editor
1.2.7 The Attribute Editor
1.2.8 The Tool Setting
1.2.9 Time Slider/Range Slider
1.2.10 Command Line and Script Editor Button
1.2.11 Helpline
1.2.12 The Workspace
1.3 All about Menus and Shortcuts
1.3.1 Main Menu and Menu Sets
1.4 Camera and Camera Settings
1.4.1 Navigating the Scene
1.4.2 Navigating with Default Cameras and View Cube
1.4.3 Adding a Camera
1.4.4 Camera Settings
1.4.5 Camera Attributes
1.5 Focus and Shade in View Editor
1.6 Transforming Objects
1.7 Creating and Placing a Geometry
1.8 Setting up a Project in Maya
1.9 Creating the Solar System
1.9.1 Creating Hierarchy
1.9.2 Animating Objects
1.9.3 Shading an Object
1.9.4 Adding Light
1.9.5 Rendering Animation
1.10 Summary
1.11 Key Terms
1.12 End Question
1.13 Further Reading

UNIT 2 : POLYGON MODELING

2.0 Introduction
2.1 Unit Objectives
2.2 Polygon Anatomy
2.2.1 Selecting and Editing Polygon Components
2.2.2 Polygon Terminology
2.2.3 Polygon Modeling
2.2.4 Polygon Normal

UNIT 3 : ORGANIC MODELING

UNIT 4 : BASIC NURBS MODELING

UNIT 5 : ADVANCED NURBS MODELING

UNIT 6 : PREPARING MODELS FOR ANIMATION

UNIT 7 : DEFORMERS

UNIT 8 : JOINTS AND SKELETONS

Course: BMG 303 CHARACTER SETUP AND ANIMATION IN MAYA

UNIT 1 : SKINNING AND ADVANCED DEFORMERS

UNIT 2 : CONNECTING ATTRIBUTES

UNIT 3 : CHARECTER CONTROLS

UNIT 4 : ANIMATION BASICS

4.0 Introduction
4.1 Unit Objectives
4.2 Tutorial on Keyframe Animation
4.2.1 Key frame animation
4.2.2 Sequencing of events
4.2.3 Fast track to keyframe animation
4.2.4 Key frame animation : twelve steps to heaven
4.3 In-between and interpolation
4.4 Setting keys
4.4.1 Animation controls
4.5 Playback controls
4.6 Animation controls menu
4.7 Basic animation principles
4.7.1 Squash and stretch
4.7.2 Anticipation follow through secondary action
4.8 Summary
4.9 Key terms
4.10 End Questions
4.11 Further reading

UNIT 5 : MECHANICS OF WALKING

5.0 Introduction
5.1 Unit Objectives
5.2 pictures in walking
5.2.1 understanding the mechanics of walking
5.2.2 animating a walk
5.2.3 keeping character ‘s feet on the ground
5.2.4 cyclical motion
5.2.5 walking tips
5.2.6 walking in pictures
5.3 walking exercise
5.4 pushing a box
5.5 Summary
5.6 Key Terms
5.7 End Question
5.8 Further Reading

UNIT 6 : ANIMATION TOOLS

6.0 Introduction
6. 1 Unit Objectives
6.2 File Referencing
6.2.1 Creating References: Hierarchical Scene Management
6.2.2 Proxy References
6.2.3 Proxies with Shared Edits
6.2.4 Proxy Referencing Workflows
6.2.5 Proxy Tags
6.2.6 Reference Editor
6.2.7 Managing References
6.2.8 Viewing Selected Refrences

Course: BMG 304 ADVANCED MAYA

UNIT 1 : TEXTURE BASICS IN MAYA

1.0 Introduction
1.1 Unit Objectives
1.2 Texturing Basics in Maya
1.2.1 Hypershade
1.3 Editing Materials Using Hypershade And Attribute Editor
1.3.1 Working with Hypershade
1.3.2 Editing Material Using Attribute Editor
1.4 Rendering Nodes and their Attributes
1.4.1 Material Nodes and their attributes
1.4.2 Texture Nodes
1.4.3 Placement Nodes
1.5 Summary
1.6 Key Terms
1.7 End Questions
1.8 Further Reading

UNIT 2 : TEXTURING IN PRACTICING

2.0 Introduction
2.1 Unit Objectives
2.2 Tutorial on building shading Networks
2.2.1 Texturing stone wall Material
2.2.2 Creating Bronze Material
2.2.3 Creating Bump & Reflectivity maps
2.3 UV Texture mapping
2.3.1 Creating Uv's
2.4 UV Texture Editor
2.4.1 Editing UVs
2.4.2 Automatic Mapping, Exporting UVs & Importing Custom Texture
2.5 Mapping Human Model
2.6 Summary
2.7 Key Terms
2.8 End Question
2.9 Further Reading

UNIT 3 : LIGHTS AND CAMERA

3.0 Introduction
3.1 Unit Objectives
3.2 Light Nodes
3.2.1 Types of lights
3.2.2 Light Effects
3.2.3 Types of shadows
3.3 Camera Nodes
3.3.1 Camera Settings
3.3.2 Camera Tools
3.3.3 Camera Attributes
3.4 Outdoor Environment Lighting

UNIT 4 : RENDERING

UNIT 5 : PARTICLES AND FIELDS

UNIT 6 : MAYA HAIR

6.0 Introduction
6.1 Unit Objectives
6.2 Using Hair in Maya
6.2.1 Creating Hairs
6.2.2 Hair Presets
6.3 Maya Hair
6.3.1 Understanding XGen
6.3.2 Creating XGen Description
6.3.3 Dynamic Curve with IK Spline
6.4 Summary
6.5 Key terms
6.6 End Question
6.7 Further Reading

UNIT 7 : MAYA CLOTH

7.0 Introduction
7.1 Unit Objectives
7.2 Loading Cloth with Maya
7.3 Creating A Table cloth using Maya classic cloth
7.3.1 Creating a dress
7.4 Summary
7.5 Key terms
7.6 End Question
7.7 Further Reading

UNIT 8 : RENDERING FOR POST - PRODUCTION

8.0 Introduction
8.1 Unit Objectives
8.2 Camera Mapping
8.3 Creating A Reflection Map
8.3.1 Environment Ball
8.4 Rendering a sequence
8.4.1 Render Layers
8.4.2 Render setting Override
8.5 Rendering in a separate passes for Post-Production
8.5.1 Multi-render pass workflow
8.5.2 Batch Render
8.6 Summary
8.7 Key terms
8.8 End Question
8.9 Further Reading

UNIT 9 : COMPOSITING FOR POST PRODUCTION

9.0 Introduction
9.1 Unit Objectives
9.2 Setting up the compositing software
9.2.1 compositing various passes
9.3 Rendering passes and compositing
9.3.1 rendering layers

Course: BMG 305: INTRODUCTION TO 3DS MAX

UNIT 1 : 3DS MAX: AN OVERVIEW

1.1 Unit Objectives
1.2 Views (Viewports)
1.2.1 Manipulating Views: Tutorial
1.3 Tools and the Main Toolbar
1.3.1 Title Bar and Menu
1.3.2 Main Toolbar
1.4 The Command Panel
1.5 Quad Menu
1.6 Rollouts: Inputs, Spinners and Flyout Menus
1.6.1 Types of Rollouts
1.6.2 Spinners
1.6.3 Flyout Menus
1.6.4 Input
1.7 Summary
1.8 Key Terms
1.9 Questions and Exercise

UNIT 2: THE 3DS MAX PRODUCTION PIPELINE

2.0 Introduction
2.1 Unit Objectives
2.2 Project Planning
2.3 Steps in Project Planning
2.3.1 Assessing the Problem
2.3.2 Bidding and Billing
2.3.3 Signing Copyright, Non-Disclosure and Non-Compete Agreements
2.3.4 Getting Approval
2.3.5 Creating Storyboards
2.3.6 Creating Mock-ups and Animatics
2.3.7 Starting Full-Scale Production and Delivering Preliminary and Final Contents
2.3.8 Delivering Preliminary Content
2.3.9 Delivering Final Content
2.3.10 Billing the Client
2.3.11 Ending the Contract
2.3.12 Giving Recognition
2.4 The Production Pipeline
2.5 Summary
2.6 Key Terms
2.7 Questions and Exercise

UNIT 3 : STARTING SIMPLE: CREATING SHAPES AND PRIMITIVES

3.0 Introduction
3.1 Unit Objectives
3.2 Creating Shapes
3.3 Creating Basic Shapes
3.3.1 Editing Splines
3.4 Building a Line

UNIT 4 : MANAGING AND MANIPULATING 3D SPACE

UNIT 5 : BUILDING WITH SUB-OBJECTS

UNIT 6 : BUILDING A WATER TOWER

UNIT 7: BUILDING THE ELASTIC-POWERED ATMOSHPHERIC TRANSFORMER

UNIT 8 : COMPLEX MODELING: CREATING A SKULL

Course: BMG 306: ADVANCED 3D MAX

UNIT 1 : BASIC HIERARCHIES AND PARAMETRIC ANIMATION

1.0 Introduction
1.1 Unit Objectives
1.2 Basic Animation
1.3 Auto Key And Set Key Modes
1.4 Animating And Wiring Parameters
1.4.1 Animating Parameters
1.4.2 Wiring Parameters
1.4.3 Creating A Hierarchy
1.5 Summary
1.6 Key Terms
1.7 End Questions
1.8 Further Reading

UNIT 2 : BUILDING A DOLPHIN CHARACTER

2.0 Introduction
2.1 Unit Objectives
2.2 Modeling Female Character
2.2.1 Tutorial: Modeling The Body
2.2.2 Tutorial: Modeling The Arm
2.3 Gloves Modeling
2.4 Modeling The Head And Ear
2.4.1 Tutorial: Modeling The Head
2.4.2 Tutorial: Modeling The Back Of Head
2.4.3 Tutorial: Modeling The Jaw And Chin
2.4.4 Tutorial: Modeling The Nose
2.5 Summary
2.6 Key Terms
2.7 End Questions
2.8 Further Reading

UNIT 3 : RIGGING AND ANIMATING

3.0 Introduction
3.1 Unit Objectives
3.2 Creating A Biped
3.2.1 Understanding The Biped Anatomy
3.2.2 Naming The Biped
3.3 Posing The Biped
3.3.1 Changing The Biped Structure
3.3.2 Working With Both Arms Or Legs
3.4 Rubber-Banding Arms And Legs
3.4.1 Linking Character Body Parts To The Biped
3.5 Animating The Biped
3.6 Summary
3.7 Key Terms
3.8 End Questions
3.9 Further Reading

UNIT 4 : BASICS OF MATERIALS

4.0 Introduction
4.1 Unit Objectives
4.2 Material Editor - Key To Creation
4.2.1 Material Editor- An Overview
4.3 Selecting A Shader
4.4 Specular Controls
4.4.1 Mapping Problems And Solutions
4.5 Bump Maps And Other Material Attributes
4.6 Summary
4.7 Key Terms
4.8 End Questions
4.9 Further Reading

UNIT 5 : MATERIALS UNWRAPPED

5.0 Introduction
5.1 Unit Objectives
5.2 Mapping With Uvw Map
5.3 Mapping With Unwrap Uvw
5.4 Creating And Applying Materials For A Flag
5.5 Summary
5.6 Key Terms
5.7 End Questions
5.8 Further Reading

UNIT 6 : LIGHTING AND ATMOSPHERICS

6.0 Introduction
6.1 Unit Objectives
6.2 Indoor And Outdoor Lighting
6.3 Adding Lights To A Scene
6.4 Customized Lighting Projection Maps And Advanced Effects
6.5 Summary
6.6 Key Terms
6.7 End Questions
6.8 Further Reading

UNIT 7 : RENDERING

7.0 Introduction
7.1 Unit Objectives
7.2 Rendering
7.2.1 Rendering Parameters
7.2.3 Tutorial: Using Network Rendering To Setup A Render Farm
7.2.4 Network Rendering With Monitor
7.3 Raytracer
7.3.1 Raytracer Parameters
7.4 Rendering Output To Frames
7.5 Cameras
7.5.1 Free Camera
7.5.2 Target Camera

UNIT 8 : PARTICLE FLOW FOR MODELING AND EFFECTS

Course: BMG 307 : CHARACTER ANIMATION

UNIT 1 : THE BASICS OF CHARACTER ANIMATION

1.0 Introduction
1.1 Unit Objectives
1.2 Introduction to 3DS MAX
1.2.1 3DS MAX
1.3 Animation Pipeline
1.4 Principles of Animation
1.5 Human Anatomy
1.5.1 Bones and Constraints
1.5.2 Animation Constraints
1.6 Modifiers
1.6.1 List of Modifiers
1.7 Expression Controller
1.8 Max Script
1.9 Summary
1.10 Key Terms
1.11 End Question
1.12 Further Reading

UNIT 2 : CHARACTER MODELLING

2.0 Introduction
2.1 Unit Objectives
2.2 Setting References on Viewport
2.2.1 Object properties
2.3 Creating Body
2.4 Creating Head
2.5 Modelling Hands
2.6 Summary
2.7 Key Term
2.8 End Question
2.9 Further Reading

UNIT 3 : REPARATION FOR ANIMATION

3.0 Introduction
3.1 Unit Objectives
3.2 Making skeleton of two legged character
3.2.1 Bone creation
3.2.2 Rigging the Legs and Feet
3.2.3 Rigging Arm and Hand
3.2.4 Using Reaction Manager
3.2.5 Elbow and Wrist Control
3.2.6 Creating Spine Control
3.2.7 Creating Head Control
3.2.8 Duplicating Left side controls onto Right side
3.2.9 Creating character

UNIT 4 : ANIMATION OF BIPED (TWO-LEGGED) CHARACTER

UNIT 5 : ANIMATION OF QUADRUPED (FOUR-LEGGED) CHARACTER

UNIT 6 : ANIMATION OF EXPRESSIONS

UNIT 7 : PREPARING BIPED WITH CHARACTER STUDIO

UNIT 8 : ANIMATION USING CHARACTER STUDIO

Course: BMG 308: CG FILM MAKING

UNIT 1 : STORY IDEAS

1.0 Introduction
1.1 Unit Objectives
1.2 Types of Story Concepts
1.3 The Idea
1.4 Motive of the Film
1.5 Avoiding Pitfalls and Perils
1.6 Not Having a Story
1.7 Sample Story
1.8 Summary
1.9 Key Terms
1.10 End Questions
1.11 Further Reading

UNIT 2 : PRODUCTION THE ANIMATION PIPELINE

2.0 Introduction
2.1 Unit Objectives
2.2 Prepare to Organize
2.3 CG's Scope of Work
2.4 Planning-A Preview of the 3D Process
2.5 Wearing the Producer's Hat
2.6 Production Documents
2.7 Scope of Work: Post-production
2.8 Feasibility Revisited
2.9 Decisions of Key Methodology
2.10 Scheduling: Adding Life to the Invention
2.11 R&D and Learning: Computer Graphics Concepts
2.12 Organizational Methods
2.13 Planning a Sample Film
2.14 Factors that Affect Scheduling
2.15 Production Tools
2.16 Role of Feasibility
2.17 Top-level Considerations
2.18 Summary
2.19 Key Terms
2.20 End Questions
2.21 Further Reading

UNIT 3 : SCRIPTWRITING: STORY AND CHARACTER THROUGH DIALOGUE

3 .1 Introduction
3.2 Unit Objectives
3.3 Preparation
3.4 Outlining the Plot
3.5 Creating a Back Story

UNIT 4 : ART DIRECTION: DESIGNING THE ANIMATION

UNIT 5 : STORYBOARDING: CINEMATIC PLANNING

UNIT 6 : SOUND A FILM'S SONIC IDENTITY

UNIT 7 : LAYOUT PREPARING THE SCENE

UNIT 8 : FACIAL ANIMATION : KEYFRAMING EXPRESSIONS

UNIT 9 : BRINGING THE BACKGROUND TO LIFE

UNIT 10 : LIGHTING AND RENDERING: CRAFTING AN ATMOSPHERE

UNIT 11 : COMPOSITING AND VIDEO EDITING: FINISHING TOUCHES

Course: BMG309: Project Work

Course: BMG310: Environment Science (UGC syllabus)

UNIT 1: THE MULTIDISCIPLINARY NATURE OF ENVIRONMENTAL STUDIES

1.1 Definition, Scope And Importance
1.1.1 Definition
1.1.2 Scope
1.1.3 Importance
1.2 Need For Public Awareness
1.2.1 Institutions In Environment
1.2.2 People In Environment

UNIT 2: NATURAL RESOURCES

2.1 Introduction
2.2 Renewable And Non-Renewable Resources
2.2.1 Natural resources and associated problems
2.2.2 Non-renewable resources
2.2.3 Renewable resources
2.3 Role Of An Individual In Conservation Of Natural Resources
2.4 Equitable Use Of Resources For Sustainable Lifestyles

UNIT 3: ECOSYSTEMS

3.1 Concept Of An Ecosystem
3.1.1 Understanding Ecosystems
3.1.2 Ecosystem Degradation
3.1.3 Resource Utilisation
3.2 Structure And Functions Of An Ecosystem
3.3 Producers, Consumers And Decomposers
3.4 Energy Flow In The Ecosystem
3.4.1 The Water Cycle
3.4.2 The Carbon Cycle
3.4.3 The Oxygen Cycle
3.4.4 The Nitrogen Cycle
3.4.5 The Energy Cycle
3.4.6 Integration Of Cycles In Nature
3.5 Ecological Succession
3.6 Food Chains, Food Webs And Ecological Pyramids
3.6.1 The Food Chains
3.6.2 The Food Webs
3.6.3 The Ecological Pyramids
3.7 Introduction, Types, Characteristic Features, Structure And Functions
3.7.1 Forest Ecosystem
3.7.2 Grassland Ecosystem

3.7.3 Desert Ecosystem
3.7.4 Aquatic Ecosystems (Ponds, Lakes, Streams, Rivers, Estuaries, Oceans)

UNIT 4: BIODIVERSITY AND ITS CONSERVATION

4.1 Introduction – Definition: Genetic, Species, Ecosystem Diversity
4.1.1 Genetic Diversity
4.1.2 Species Diversity
4.1.3 Ecosystem Diversity
4.2 Biogeographic Classification Of India
4.3 Value Of Biodiversity: Consumptive, Productive Use, Social, Ethical, Aesthetic And Option Values
4.3.1consumptive Value
4.3.2 Productive Value
4.3.3 Social Value
4.3.4 Ethical Value
4.3.5 Aesthetic Value
4.3.6 Option Value
4.4 Biodiversity At Global, National And Local Levels
4.5 India As A Mega Diversity Nation
4.6 Hotspots Of Biodiversity
4.7 Threats To Biodiversity: Habitat Loss, Poaching Of Wildlife, Man-Wildlife Conflicts
4.8 Endangered And Endemic Species Of India
4.8.1 Common Plant Species
4.8.2 Common Animal Species
4.9 Conservation Of Biodiversity: In-Situ And Ex-Situ
4.9.1 In-Situ Conservation
4.9.2 Ex-Situ Conservation

UNIT 5: ENVIRONMENTAL POLLUTION

5.1 Definition
5.2 Causes, Effects And Control Measures Of:
5.2.1 Air Pollution
5.2.2 Water Pollution
5.2.3 Soil Pollution
5.2.4 Marine Pollution
5.2.5 Noise Pollution
5.2.6 Thermal Pollution
5.2.7 Nuclear Hazards
5.3 Solid Waste Management: Causes, Effects And Control Measures Of Urban And Industrial Waste
5.4 Role Of Individuals In Pollution Prevention
5.5 Pollution Case Studies
5.6 Disaster Management: Floods, Earthquakes, Cyclones, Landslides

UNIT 6: SOCIAL ISSUES AND THE ENVIRONMENT

6.1 From Unsustainable To Sustainable Development
6.2 Urban Problems Related To Energy
6.3 Water Conservation, Rain Water Harvesting, Watershed Management
6.3.1 Water Conservation
6.3.2 Rain Water Harvesting
6.3.3 Watershed Management
6.4 Resettlement And Rehabilitation Of People; Its Problems And Concerns. Case Studies
6.5 Environmental Ethics: Issues And Possible Solutions
6.5.1 Resource Consumption Patterns And The Need For Their Equitable Utilisation
6.5.2 Equity – Disparity In The Northern And Southern Countries
6.5.3 Urban – Rural Equity Issues
6.5.4 The Need For Gender Equity
6.5.5 Preserving Resources For Future Generations
6.5.6 The Rights Of Animals
6.5.7 The Ethical Basis Of Environment Education And Awareness
6.5.8 The Conservation Ethic And Traditional Value Systems Of India
6.6 Climate Change, Global Warming, Acid Rain, Ozone Layer Depletion, Nuclear Accidents And Nuclear Holocaust. Case Studies
6.6.1 Climate Change
6.6.2 Global Warming
6.6.3 Acid Rain
6.6.4 Ozone Layer Depletion
6.6.5 Nuclear Accidents And Nuclear Holocaust
6.7 Wasteland Reclamation
6.8 Consumerism And Waste Products
6.9 Environment Protection Act
6.10 Air (Prevention And Control Of Pollution) Act
6.11 Water (Prevention And Control Of Pollution) Act
6.12 Wildlife Protection Act
6.13 Forest Conservation Act
6.14 Issues Involved In Enforcement Of Environmental Legislation
6.14.1Environment Impact Assessment (EIA)
6.14.2 Citizens Actions And Action Groups
6.15 Public Awareness
6.15.1 Using An Environmental Calendar Of Activities
6.15.2 What Can I Do?

UNIT 7: HUMAN POPULATION AND THE ENVIRONMENT

7.1 Population Growth, Variation Among Nations
7.1.1 Global population growth
7.2 Population Explosion –Family Welfare Program
7.2.1 Methods of sterilization
7.1.2 Urbanization
7.3 Environmental And Human Health

7.3.1 Environmental health
7.3.2 Climate and health
7.3.3 Infectious diseases
7.3.4 Water-related diseases
7.3.5 Risks due to chemicals in food
7.3.6 Cancer and environment
7.4 Human Rights
7.4.1 Equity
7.4.2 Nutrition, health and human rights
7.4.3 Intellectual Property Rights and Community Biodiversity Registers
7.5 Value Education
7.5.1 Environmental Values
7.5.2 Valuing Nature
7.5.3 Valuing cultures
7.5.4 Social justice
7.5.5 Human heritage
7.5.6 Equitable use of Resources
7.5.7 Common Property Resources
7.5.8 Ecological degradation
7.6 Hiv/Aids
7.7 Women And Child Welfare
7.8 Role Of Information Technology In Environment And Human Health