

## M4.2-R4: INTRODUCTION TO MULTIMEDIA

<b>Introduction to Multimedia</b> What is multimedia, Components of multimedia, Web and Internet multimedia applications, Transition from conventional media to digital media.	<b>1-4</b>
<b>Computer Fonts and Hypertext</b> Usage of text in Multimedia, Families and faces of fonts, outline fonts, bitmap fonts International character sets and hypertext, Digital fonts techniques.	<b>5-10</b>
<b>Audio fundamentals and representations</b> Digitization of sound, frequency and bandwidth, decibel system, data rate, audio file format	<b>11-12</b>
Sound synthesis, MIDI, wavetable, Compression and transmission of audio on Internet, Adding sound to your multimedia project, Audio software and hardware	<b>13-16</b>
<b>Image fundamentals and representations</b> Colour Science , Colour, Colour Models, Colour palettes, Dithering, 2D Graphics, Image Compression and File Formats : GIF, JPEG, JPEG 2000, PNG, TIFF, EXIF, PS, PDF,	<b>17-20</b>
Basic Image Processing [ Can Use Photoshop ], Use of image editing software, White balance correction, Dynamic range correction, Gamma correction, Photo Retouching.	<b>21-24</b>
<b>Video and Animation</b> Video Basics , How Video Works, Broadcast Video Standards, Analog video, Digital video,	<b>25-27</b>
Video Recording and Tape formats, Shooting and Editing Video (Use Adobe Premier for editing), Video Compression and File Formats. Video compression based on motion compensation	<b>28-31</b>
MPEG-1, MPEG-2, MPEG-4, MPEG-7, MPEG-21,	<b>32-34</b>
Animation: Cell Animation, Computer Animation, Morphing.	<b>35-36</b>
<b>Multimedia Authoring</b> Multimedia Authoring Basics, Some Authoring Tools, Macromedia Director & Flash.	<b>37-39</b>
<b>Review</b>	<b>40</b>