

Outline scheme of learning

Edexcel GCE in Applied ICT A2 - Unit 10: Using Multimedia Software

Topic	Learning activities/outcomes	Learning Objectives &/or Key question	Resources	Homework and Assignments	Syllabus extract(s)
1.	<p>Multimedia applications</p> <ul style="list-style-type: none"> • Discuss unit requirements (e.g. assessment evidence) • Define multimedia: Activity 1 • Investigate and research existing applications: Activities 2, 3 and 4. Discuss the purpose of these applications and evaluate them. • Identify multimedia components: Activity 5 • Briefly discuss the scenario 	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Describe what is meant by interactive multimedia • Appreciate the range of multimedia products available • Evaluate such products • Identify the components of these products 	<p>Chapter 10.1</p> <p>Unit 10 Specification</p> <p>Access to internet</p> <p>ActiveBook</p> <p>ActiveBook data files</p> <p>Teacher's Notes</p> <p>Sample multimedia applications</p>	<p>Activities 1 to 5</p>	<p>10.1 Applications of multimedia</p> <p>10.2 Functional specification</p> <p>10.14 Evaluation</p>
2	<p>Multimedia principles and techniques</p> <ul style="list-style-type: none"> • Creating and manipulating images: Activities 1 to 8 (and additional activity in Teacher's Notes) <ul style="list-style-type: none"> • Colour • Contrast, brightness and hue • Using web-safe colours • Cropping, resizing and filtering • Compression • Vector and bitmap graphics • Creating animations: Activities 9 to 17 <ul style="list-style-type: none"> • Stop-motion animation • Cartoon animation • Time-lapse animation • Tweening • Other techniques • Creating videos: Activities 18 to 20 <ul style="list-style-type: none"> • Creating a video • Editing and testing • Creating sound: Activities 21 to 26 (and additional activity in Teacher's Notes) <ul style="list-style-type: none"> • Linking sound and images • Creating sound files • Editing sound files • Comparing sound quality • Creating sound files for the scenario 	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Create and manipulate images to a level suitable for creating professional-looking multimedia products • Create and manipulate animations to a level suitable for creating professional-looking multimedia products • Create and edit short video clips to a level suitable for creating professional-looking multimedia products • Create and edit sound files to a level suitable for creating professional-looking multimedia products 	<p>Chapter 10.2</p> <p>ActiveBook data files</p> <p>Teacher's Notes</p> <p>Access to internet</p> <p>Software: Excel and Access if possible (see additional activity with colour, Teacher's Notes)</p> <p>Graphics package</p> <p>Animation package</p> <p>Video Package</p> <p>Sound Recorder Package</p> <p>Software applications referred to in activities include: Fireworks, Flash, Windows Movie Maker</p> <p>Digital Camera with video creation</p> <p>Sound card, speakers and microphone</p>	<p>Activities 1 to 26</p> <p>Additional activity with colour (see Teacher's Notes)</p> <p>Additional activity with sound (see Teacher's Notes) – including presentation to group</p>	<p>10.5 Graphical design (e.g. web-safe colours)</p> <p>10.7 Image capture and manipulation</p> <p>10.8 Video</p> <p>10.9 Sound</p> <p>10.10 Animation</p>

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3	<p>Multimedia integration and production</p> <ul style="list-style-type: none"> Integrating sound, video and animation with text and images (additional activity in Teacher's Notes) <ul style="list-style-type: none"> Synchronise sounds Adding and masking video Combining animation and video Publishing files <ul style="list-style-type: none"> Flash swf files Interactivity: Activities 5 to 12 <ul style="list-style-type: none"> Adding interactivity Identifying interactivity methods and components Create an interactive quiz Identifying control types Creating buttons for navigation Creating interactive text Auto-running a web-site presentation Implications of different formats (additional activity in Teacher's Notes) 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Integrate the various multimedia media components for display in a multimedia presentation package Identify different interactivity methods Use different interactivity techniques Appreciate the advantages and disadvantages of using different formats 	<p>Chapter 10.3</p> <p>ActiveBook data files</p> <p>Teacher's Notes</p> <p>Access to internet</p> <p>Access to intranet</p> <p>Software: As last chapter plus multimedia authoring package</p> <p>Software applications referred to in activities: as in last chapter plus Dreamweaver</p>	<p>Activities 1 to 12</p> <p>Additional activity investigating different formats for web output (see Teacher's Notes)</p>	<p>10. 6 Interactivity design</p> <p>10.7 Image capture and manipulation</p> <p>10. 8 Video</p> <p>10.9 Sound</p> <p>10.10 Animation</p> <p>10.11 User interface (e.g. using interactivity features)</p>
4	<p>The multimedia project: Tackling the coursework</p> <ul style="list-style-type: none"> Overview of development stages Functional specification: Activities 1 and 2 <ul style="list-style-type: none"> What it is Why it is needed Writing a functional specification Design: Activities 3 and 4 (and additional activity in Teacher's Notes) <ul style="list-style-type: none"> Structure Navigation Consistency, layout and graphical design – Usability and Accessibility Prototyping, construction and testing: Activities 5 to 7 <ul style="list-style-type: none"> Initial test plans and logs Gathering the material Constructing the first prototype Developing further prototypes (see Teacher's Notes) Documentation (and additional activity in Teacher's Notes) Distribution (and additional activity in Teacher's Notes) Evaluation Tackling the assessment 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Understand the need for the different development stages Produce a functional specification Produce design documentation Identify the elements of a good user interface Construct prototypes Testing products thoroughly and systematically Produce thorough documentation Successfully produce a final product for distribution Evaluate their own work Tackle the assessment successfully 	<p>Chapter 10.4</p> <p>ActiveBook data files</p> <p>Teacher's Notes</p> <p>Software: As previous chapters plus word processing package for documentation and CD burning software</p>	<p>Activities 1 to 7</p> <p>Additional design activity (see Teacher's Notes)</p> <p>Additional documentation activity (see Teacher's Notes)</p> <p>Additional documentation activity (see Teacher's Notes)</p> <p>Additional testing and evaluation activity (see Teacher's Notes)</p>	<p>10.2 Functional Specification</p> <p>10.3 Product design</p> <p>10.5 Graphical design</p> <p>10.4 Navigation</p> <p>10.11 User Interface</p> <p>10.12 Testing</p> <p>10.13 Distribution</p> <p>10.14 Evaluation</p> <p>Assessment Evidence</p>