OCR
Oxford Cambridge and RSA

Unit Title:	**Audio software**
OCR unit number:	6
Level:	3
Credit value:	4
Guided learning hours:	30
Unit reference number:	H/502/4391

Unit purpose and aim

This is the ability to use a software application designed to record and edit audio sequences.

This unit is about the skills and knowledge needed by an IT User to select and use a range of advanced of audio software tools and techniques to record and edit complex or non-routine audio sequences.

Audio software tools and techniques will be defined as 'advanced' because:

- the software tools and functions used will be complex, and at times involve having the idea that there may be a tool or function to do something (e.g. improve efficiency or create an effect), exploring technical support, self-teaching and applying;
- the inputting, manipulating and outputting techniques will be complex, and will involve research, identification and application; and
- the user will take full responsibility for inputting, manipulating and outputting the information.

Learning Outcomes	Assessment Criteria	Examples
The learner will: 1 Use audio hardware and software to capture sequences	The learner can: 1.1. Determine the content needed for sequences, and when to originate it 1.2. Explain any compatibility issues between combinations of input device and audio software 1.3. Select and use an appropriate combination of input device and audio software to optimise the recording of information 1.4. Select and use an appropriate combination of hardware and software to originate and develop new content for sequences	Audio and video compatibility issues: between built-in codec used by input device, available editing software, file formats, operating systems, plug-ins Input devices: Webcam, video camera, microphone, Dictaphone, mobile phone; difference between analogue and digital; low and high resolution; ; Input techniques: Copy and paste, screen grabs/shots, file download (e.g. connect USB lead, drag and drop) Originate and develop: Process: Plan (e.g. storyboard, script, compose), prepare (e.g. information, equipment),

Learning Outcomes	Assessment Criteria	Examples
	1.5. Analyse and explain the impact file size and file format will have, including when to use information coding and compression 1.6. Store and retrieve sequences using appropriate file formats and compression, in line with local guidelines and conventions where available	develop, test, refine; Types of content: audio (e.g. music, sound effects, voiceovers), visual (e.g. drama, dance, animation) File size: Small, medium, large, link between size and quality (e.g. small – low resolution; large – high resolution) File format: Proprietary formats supported by software used (e.g. QuickTime, RealPlayer, iTunes) Container formats: Audio (e.g. WAV, XMF, AIFF); Audio/video (e.g. 3GP, AVI, MP4, OGG, MOV) Popularity, overhead, support for advanced functionality and content, support of streaming media Information coding and compression: Codec, compression, difference between lossy and lossless compression, factors affecting video quality Store and retrieve: Save, save as, find, open, close
2 Use audio software tools and techniques to edit sequences	2.1. Select and use appropriate audio software tools and techniques to mark-up and edit sequences to achieve required effects 2.2. Provide guidance on how copyright constraints affect use of own and others' information 2.3. Organise, combine and link information for sequences in line with any copyright constraints, including across different	Sequence: short (e.g. 2 mins), b&w, medium length (e.g. 10 mins, 30 mins), colour Marking-up and editing tools: Preset by software, key frames, sequences; Cut, copy, paste, sequence Combine information: Combine images with sound (e.g. dub or overlay sound track onto film sequence; integrate a audio or video sequence with another application).

Learning Outcomes	Assessment Criteria	Examples
	software	Techniques: Copy and paste, insert, screen grabs/shots, File download (e.g. connect USB lead, drag and drop), file transfer protocol (FTP) Forms of information: moving images, sound; pre-recorded, live, web-streaming Copyright constraints: Effect of copyright law (e.g. on music downloads or use of other people's images), acknowledgment of sources, avoiding plagiarism, provisions of the Data Protection Act Quality issues: contrast, volume, visual (e.g. brightness, colour balance, monochrome), sound (e.g. treble, bass, balance), remove unwanted objects, noise reduction Audio and video sequence problems: high or low contrast, volume, visual (e.g. jerkiness, dropping frames, break-up, freezes, blurriness, pixilation), sound (e.g. clicks, disjoints, noise)
3 Play and present audio sequences	3.1. Explain the features and constraints of playback software and display devices as appropriate for different purposes 3.2. Select and use an appropriate combination of audio playback software and display device to suit the file format 3.3. Present sequences effectively by exploiting the features and settings of the playback software and display device to maximise quality and	Features and constraints: Software supported, memory, processing speed, screen resolution, data bandwidth, transmission speeds Display device: PC, laptop, video camera, Dictaphone, mobile phone, handheld audio or video device (e.g. mp3 player, iPod) Adjust playback and display settings: Start, stop, fast forward, rewind, pause, volume, contrast, brightness, thumbnail, quarter screen, full screen, screen resolution,

Learning Outcomes	Assessment Criteria	Examples
	meet needs 3.4. Evaluate the quality of sequences and explain how to respond to quality issues and problems	colour balance, sound quality

Assessment

All ITQ units may be assessed using any method, or combination of methods, which clearly demonstrates that the learning outcomes and assessment criteria have been met. Assessments must also take into account the additional information provided in the unit Purpose and Aims relating to the level of demand of:

- the activity, task, problem or question and the context in which it is set;
- the information input and output type and structure involved; and
- the IT tools, techniques or functions to be used.

See the Assessment and postal moderation section of the ITQ Centre Handbook.

Evidence requirements

Candidates must complete the Evidence Checklist for this unit. Individual unit checklists are available to download from the qualification webpage (see forms).

Guidance on assessment and evidence requirements

Please refer to the ITQ centre handbook on our webpage.

Details of relationship between the unit and national occupational standards

This unit maps fully to competences outlined in IT User National Occupational Standards version 3 (2009).