Unit 20: Music and Sound for the Moving Image

Unit code: F/600/6989

QCF Level 3: BTEC National

Credit value: 10

Guided learning hours: 60

● Aim and purpose

The aim of this unit is to develop learners' music production, composition and sound creation skills relating to projects involving the moving image.

● Unit introduction

The ability to create soundtracks for moving images requires the skills of music production, composition and sound design. Those who find the most success in this area are proficient at all three. This unit is designed to allow learners to apply these skills to the various aspects of a project based on the moving image. In order to do this successfully they must first gain an understanding of the individual elements that comprise a typical project.

Learners will be expected to create the musical soundtrack for a moving image project, and demonstrate the importance of the underlying principles of this craft, such as sync points, tempo and the use of harmony and rhythm to create mood, relating the audio components they create to the visual elements in the moving image, while developing an appreciation of the importance of the film-maker/composer relationship.

Learners will also be expected to create the other sonic elements that comprise a moving image project such as sound effects and atmospheres, recognising the importance that these elements play in the soundtrack as a whole, and their relationship to the moving image.

As part of the unit, learners will create a finished product combining the elements they have created with the moving image, and deliver this in suitable formats.

● Learning outcomes

On completion of this unit a learner should:

1   Understand the components of a musical project based on a moving image

2   Be able to produce music for a project based on a moving image

3   Be able to produce non-musical sonic elements for a project based on a moving image

4   Be able to deliver the project in appropriate formats.

Unit content

1 Understand the components of a musical project based on a moving image

Audio components: music; atmospheres; sound effects; voice tracks; temp tracks

Visual components: animations; live footage; stills; logos and titles

Structures: storyboard; internal structure; pace; edits; titles

2 Be able to produce music for a project based on a moving image

Musical elements: harmony; rhythm; tempo; texture; structure; diegetic and non-diegetic music

Production techniques: sequencing; synthesis; sampling; editing existing material; EQ; balance; mixing techniques

Related issues: rights eg sample clearance, MCPS/PRS; acceptable idiomatic use; notions of ownership; meeting the needs of the client/commissioner

3 Be able to produce non-musical sonic elements for a project based on a moving image

Sonic elements: atmospheres; spot effects; visual punctuation; diegetic and non-diegetic sound

Production techniques: sequencing; synthesis; sampling; editing existing material; EQ; balance; mixing techniques

Related issues: rights eg sample clearance, MCPS/PRS; acceptable idiomatic use; notions of ownership; meeting the needs of the commissioner

4 Be able to deliver the project in appropriate formats

Formats: file formats eg QuickTime, RealPlayer, Windows Media, Flash; compatibility

File types: file types eg mp3, mp4, mov, wma, swf; compatibility

Compression: bit depth; sample rate; frame rate; movie size; codecs; quality; file size

Delivery: physical media; electronic delivery eg email, internet, podcasts, web-hosting

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 explain the components of a musical project based on a moving image [IE, RL, SM]	**M1** illustrate the components of a musical project based on a moving image	**D1** analyse the components of a musical project based on a moving image
P2 produce music for a given moving image [CT, RL, SM, EP]	**M2** produce music for a given moving image competently	**D2** produce music for a given moving image with confidence and flair
P3 produce non-musical sonic components for a given moving image [CT, RL, SM, EP]	**M3** produce non-musical sonic components for a given moving image competently	**D3** produce non-musical sonic components for a given moving image with confidence and flair
P4 create a finished project incorporating moving image, music and sound design in appropriate formats competently and with limited tutor support. [CT, RL, SM, EP]	**M4** create a finished project incorporating moving image, music and sound design in appropriate formats competently and with total independence.	**D4** create a finished project incorporating moving image, music and sound design in appropriate formats with total independence, demonstrating mastery of the processes involved.

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

Essential guidance for tutors

Delivery

Most of this unit should be delivered through practical workshops. Learners will need access to music sequencing software that will support video files, and a wide range of sound sources including synthesisers, samplers and sound libraries. They will also need access to these systems outside class time in order to prepare evidence required for assignments. Watching and listening to a wide variety of moving image examples will form the foundation of this unit, enabling learners to discover what elements are required in terms of music and sound, and their relationship to the image.

Learners should be creating music and non-musical sound throughout the unit in order to develop their skills, and supporting their knowledge of theory through practical application. Learners should be encouraged to engage where possible with commissioning clients, and to submit practical work to deadlines set by the client, in order to gain an insight into this aspect of the unit. It is unlikely that centres will be able to organise professional opportunities for all learners, but collaboration with learners on other courses (eg Media) and involvement with industry-led competitions will provide valuable experience in simulated situations.

Learners must be aware that it is not enough to simply create the music and sound required for such projects, and that the means by which they deliver their work to the client, and the impression that this makes, is vitally important.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Introduction to the programme and structure of the programme of learning.
Understanding the components of a moving image project – learning outcome 1: ● analysing video components ● analysing audio components ● analysing structures of moving image projects.
Assignment 1: The Components of a Moving Image Project – P1, M1, D1 ● Learners to prepare presentations with tutor facilitation. ● Learners to give presentations. ● Peer and tutor feedback to be reviewed and actions noted.
Producing music for a moving image project – learning outcome 2; tutor-led workshops to cover: ● musical elements ● production elements ● related issues.
Assignment 2: Music to Picture – P2, M2, D2 ● Learner practical work/resource-based learning.
Producing sound design for a moving image project – learning outcome 3; tutor-led workshops to cover: ● sonic elements ● production techniques ● related issues.
Assignment 3: Sound Design – P3, M3, D3 ● Learner practical work/resource-based learning.
Delivery – methods and formats – learning outcome 4; tutor-led workshops to cover: ● formats ● compression ● delivery mechanisms.
Assignment 4: Delivering Your Work to the Client – P4, M4, D4 Learner practical work/resource-based learning.
Review of unit and assignments.

Assessment

This unit is not only about the learner's ability to create musical and non-musical sound for moving image projects, but also about their understanding of the process and how they deliver their work to the client. It is possible to approach the learning outcomes one by one, and it is likely that this is how they will be delivered during the initial stages of this unit (with individual pieces of evidence addressing each outcome in turn), but it is also likely that a single final submission could provide evidence for multiple criteria and give access to the widest range of grades.

Due to the nature of the evidence required for the practical learning outcomes, it is unlikely that group work will create sufficient evidence to identify and support the individual contributions of each learner.

Learning outcome 1 could be evidenced through a written report, but the nature of evidence required for higher grades suggest that giving a recorded oral presentation using suitable software is a more appropriate method of assessment. For P1, learners will provide simple unelaborated explanations of each element comprising a typical moving image-based project. To achieve M1, they will elaborate their explanations with reference to suitable examples. For D1, learners will discuss the relative importance of each example component, and the contribution it makes to the success of the project from which it is taken. Cross-referencing to other projects could be used to support their arguments.

Learning outcome 2 will be evidenced by learners producing a musical soundtrack for a given moving image project. To achieve P2 learners will need to submit a single file that combines the given moving image file with their music soundtrack, and the sequencer project/session if appropriate. For M2, the music produced should be appropriate for the given moving image project, supporting the structure and narrative with regard to sync points and meeting the requirements of any 'client brief'. To achieve D2, as well as meeting the requirements for P2 and M2, the evidence that learners submit will show that they have mastered the skills required to degree where they are able to apply their own creativity with confidence, and create original and appropriate music that enhances the given moving image.

Learning outcome 3 will be evidenced by learners producing a (non-musical) sound design for a given moving image project. This should include atmospheres as well as spot effects. To achieve P3 learners will need to submit a single file that combines the given moving image file with their sound design, and the sequencer project/session if appropriate. For M2, the sound design produced should be appropriate for the given moving image project, supporting the structure and narrative with regard to sync points and meeting the requirements of any 'client brief'. To achieve D3, as well as meeting the requirements for P3 and M3, the evidence that learners submit will show that they have mastered the skills required to degree where they are able to apply their own creativity with confidence, and create an appropriate sound design that enhances the given moving image.

For learning outcome 4 learners should create the means by which they can deliver their work to the 'client'. Suitable evidence includes disk-based formats, and those formats suitable for online delivery. The learning outcome (and grading criteria) refers to 'formats', which implies that learners should submit two distinct types of evidence. The first is a physical object, which can be submitted and filed in the traditional sense; the second should be in a format that is suitable for online delivery, so is best submitted using the medium for which it is designed, such as a learning platform, managed WIKI, virtual learning environment, etc.

To achieve P4 learners will be required to submit evidence using the specified formats, but may require tutor support to do so. Those who require no tutor support will achieve M4, and this should be formally evidenced by tutor observation report. To achieve D4 the learner's written piece will demonstrate a mastery of the processes involved, in addition to the evidence required for P4 and M4.

Ideally learners will have more than one chance to address each learning outcome, and as suggested above, an initial assignment addressing each practical learning outcome individually, and a final project that combines learning outcome 2,3 and 4 would be one way to offer this opportunity.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, M1, D1	The Components of a Moving Image Project	Learners will analyse a range of moving image based material (movies, trailers, TV ads, etc) identifying audio and visual elements.	Individual presentation to include: • video examples • audio examples.
P2, M2, D2	Music to Picture	A video production company has commissioned an original piece of music.	Evidence to include: • movie file with music • sequencer project/session • report.
P3, M3, D3	Sound Design	The same video production company also requires sound design for the same project.	Evidence to include: • movie file with sound design • sequencer project/session if appropriate • report.
P4, M4, D4	Delivering Your Work to the Client	You are required to send the client your work in a suitable format.	Evidence to include: • complete project on disk (movie file with music track and sound design incorporated) • complete project available online.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Music and Music Technology sector suite. This unit has particular links with the following unit titles in the BTEC Music and Music Technology suite:

Level 1	Level 2	Level 3
		Composing Music
		Sequencing Systems and Techniques
		Sound Creation and Manipulation

This unit also has links with the following National Occupational Standards:

Music Business (Record Labels)

- IM28 Create Music For Interactive Media Products.

Essential resources

Initially, learners will need classroom/lecture sessions appropriate for the delivery of theory-based lessons, as well as access to examples of a variety of multimedia projects in order to make the links between theory and implementation.

For the majority of the unit, learners will need classroom/workshop sessions where they are able to apply the skills demonstrated by their tutor in the preparation of their own work, and request assistance where appropriate. Classrooms will need to be equipped to an appropriate standard, with modern, reliable computers running appropriate software, access to adequate monitoring for demonstration and private study, projection and printing facilities. Software packages provided should give access to a wide range of sound-to-picture techniques (timeline-based sequencing, detailed audio/MIDI editing, etc) and compositional resources (loops, instruments, samples, etc). Where the software does not allow the incorporation of the created soundtrack into the given movie, additional software must be provided to allow this.

The will also need access to compression and DVD burning software, as well as a means by which online delivery of materials can be implemented, such as a virtual learning environment, learning platform or managed WIKI.

Indicative reading for learners

Textbooks

Aikin J – *Power Tools for Synthesizer Programming* (Backbeat UK, 2004) ISBN 978-0879307738

Cann S – *How to Make a Noise: A Comprehensive Guide to Synthesizer Programming* (Coombe Hill, 2007) ISBN 978-0955495502

Case A – *Sound FX: Unlocking the Creative Potential of Recording Studio Effects* (Focal Press, 2007) ISBN 978-0240520322

Davis R – *Complete Guide to Film Scoring* (International Music Press/Berklee Press, 2000) ISBN-10 978-0634006364

Hoffert P – *Composing Music for Videogames, Websites, Presentations and Other New Media* (Berklee Press, 2007) ISBN 978-0876390641

Kompanek S – *From Score to Screen* (Music Sales, 2004) ISBN-10 978-0825673085

Nahmani D – *Apple Pro Training Series: Logic Pro 8 and Logic Express 8: Creating and Producing Professional Music* (Peachpit Press, 2007) ISBN 978-0321502926

Rona J – *The Reel World: Scoring for Pictures* (Music Pro Guides, 2009) ISBN-10 978-1423434832

Shepherd A – *Pro Tools for Video, Film and Multimedia* (Delmar, 2008) ISBN-10 978-1598635324

Sonnenschein D – *Sound Design: The Expressive Power of Music, Voice and Sound Effects in Cinema* (Michael Wiese Productions, 2001) ISBN 978-0941188265

Viers R – *The Sound Effects Bible: How to Create and Record Hollywood Style Sound Effects* (Michael Wiese Productions, 2008) ISBN 978-1932907483

Williams J – *On Track: A Guide to Contemporary Film Scoring* (Routledge, 2004) ISBN 978-0415941365

Journal

Sound On Sound

Websites

Audio.tutsplus.com   AudioTuts + Audio Blog

www.macprovideo.com   Mac Pro Video

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	analysing moving picture-based projects preparing presentations
Creative thinkers	creating music and sound design
Reflective learners	responding to feedback during the creative process
Self-managers	working towards a deadline
Effective participators	planning creative projects.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	researching elements of moving picture-based projects
Creative thinkers	adapting soundtracks to support moving pictures
Reflective learners	giving and receiving feedback in 'critique' sessions
Self-managers	balancing the requirements of the film-maker against personal creative involvement
Effective participators	working with student film-makers.

● Functional Skills – Level 2

Skill	When learners are …
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	creating music and sound design for moving picture-based projects
Use ICT to effectively plan work and evaluate the effectiveness of the ICT system they have used	creating music and sound design for moving picture-based projects
Manage information storage to enable efficient retrieval	creating music and sound design for moving picture-based projects
Follow and understand the need for safety and security practices	creating music and sound design for moving picture-based projects
Troubleshoot	creating music and sound design for moving picture-based projects
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	preparing presentations
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	preparing presentations
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: • text and tables • images • numbers • records	preparing presentations
Bring together information to suit content and purpose	preparing presentations
Present information in ways that are fit for purpose and audience	preparing presentations
Evaluate the selection and use of ICT tools and facilities used to present information	preparing presentations
Select and use ICT to communicate and exchange information safely, responsibly and effectively including storage of messages and contact lists	preparing presentations

Skill	When learners are ...
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	contributing to 'critique' based peer feedback sessions
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	preparing presentations and supporting scripts.