UXBRIDGE
HIGH SCHOOL

Sixth Form
Transition Pack

DIGITAL MUSIC PRODUCTION

COURSE INTRODUCTION

More than 90% of all the music we ever hear comes through a speaker, played back via a digitally-based device. The importance of music in our economy and way of life has never been greater; the list of purposes for music and sound in the fields of entertainment, business, healthcare, lifestyle, sport and fitness activities is endless.

Since 1981, the world of music and the music industry has moved almost exclusively to digital means to create, capture, process and produce sounds and music. The incredible power and capability of today's computers and devices offers musicians unprecedented possibilities and potential. But at the heart of it all, you need to be a *musician* to compose and create end results that strike fire into hearts, and draw tears from eyes.

Digital Music Production is a new and contemporary course that has been designed by current industry professionals, to develop musically-talented young people with an aptitude and enthusiasm for technology into 'digital musicians', ready to create the next generation of exciting, engaging and successful sounds and styles.

Students will study five units, covering the following:
- **Music and Sound for Media**
- **DAW Production**
- **Remixing and Reworking**
- **Mixing and Mastering Techniques**
- **Commercial Music Production**

This qualification enables students to acquire substantial practical musical skills, as performer, composer, listener and producer. It has strong links to Computing, Maths, Media, Psychology and Business.

Britain leads the world in digital music innovation. Exports of UK-created music totaled more than £2.6 Billion in 2018. With live and recorded sectors in growth, it's a great time to be taking a step into the Music Industry.

Essential summer reading

Paul White – Creative Recording parts 1 and 2

Godric Wilkie – The Studio Musician's Jargonbuster

Dennis DeSantis - Creative Strategies for Electronic Music Producers

Sound on Sound Magazine – Subscribe, buy and/or online https://www.soundonsound.com/

Computer Music Magazine – Available in good news outlets

Essential summer viewing/listening

Chris Denogean explains a 4-Mic set up:

 https://www.youtube.com/watch?v=ghE1WagzEnw

Manu Nirvana explains how Dynamic and Capacitor Mic's work:

https://www.youtube.com/watch?v=eReuTkClSNc

Joe Chiccareli explains the positives and negatives of digital recording vs analogue tape

https://www.youtube.com/watch?v=7jYd0W9QKP4

Film-maker 'IQ video' explains many digital audio terms in the context of sound for film:

https://www.youtube.com/watch?v=S9cP1WHL0Zo

Task to be completed

Introduction

As a digital musician, you will need to develop the skill to hear the musical possibilities in any sounds that you hear. You also need to be able to create music that meets the needs of a real purpose, within a short space of preparation time.

Learning outcomes

1. Understand the importance of listening with respect to the brief when capturing sounds
2. Understand how to ensure that sound levels are optimal when recording, applying the key terms **Signal, Noise, Gain, Bit Rate, Sample Rate, Peak**
3. Use a recognized music form to create structure and integrity in the musical end-result

Task 1: Analyse the Brief

Your brief is to create some music that is at least 5 minutes long, for use as ambient music at a school event, in which parents and students attend a talk to help them understand the school's options process for Sixth Form. The title of the music will be: *The Options*.

The students are interested in a wide range of courses, that cover issues such as the environment and climate change, scientific discovery and experimentation, sport and fitness, theatre art forms and the patterns and rules of mathematics. *Your music has to somehow project a sense of these areas of interest.*

If your piece is successful, it will be used as part of the Sixth Form Options event in the coming year ahead.

You should analyse the brief and decide on the following key elements of your music:
- Tempo
- Dynamic range
- Mood
- Harmony and Tonality – *major, minor, alternative chords, or a mix?*
- Structure – choose Binary AABB, Ternary ABA or Rondo form ABACADA

Task 2: Prepare a mobile digital recording device for use
- You must prepare a device to record sounds from different natural and man-made environments. A smartphone would be ideal for this. There are ways in which you can enhance the ability of a smartphone to record sound with it's tiny microphone: Can you research to find out how you might use some of them?
- Download and install one of the free or cheaply available apps to record and edit sound on a smartphone. For iPhones, Voice Record PRO is highly regarded, as is the iOS version of Garageand. For android, Music Maker Jam is popular.

Task 3: Record a selection of at least 7 different environmental sounds

You should record at least 7 different environmental sounds, which can be from nature or man-made situations. While doing this, try to feel and hear what you want your end-product to sound like and how you can project the themes (ref. Task 1 paragraph 2).

When setting up to record, use your Smartphone App if possible, to adjust the GAIN settings, so that the recording level is as strong as possible without distorting (*going into the red*).

Walk around within the environment, get down low, stand up (safely) higher and record exactly where all the sounds you hear are balanced, clear and satisfying.

Task 4: Download your recorded sounds onto a Mac or PC

Export your sounds from your phone onto a Mac or PC.

TIP: Saving them to a cloud-based server might take a long time, you will find that having the audio files stored locally while working on them is less *glitchy*.

Task 5: Arrange and musically Combine your sounds to create your final piece: *The Options*

Once you have exported your sounds from your phone onto a Mac or PC, download the free software 'Audacity' https://www.audacityteam.org/

Use this software to arrange, combine, extend and experiment with your sounds. You should aim to structure the musical result so that it reflects the choices you made about the Task 1.

Challenge: If you have the budget or you already have a DAW app on your PC or MAC, you can export the whole 7mins+ mix from Audacity into this and then add more sounds, loops, effects and editing adjustments, to perfect the mix and enhance the appeal to the target audience of 16-17 year olds further.

OPTIONAL AUDIO SOFTWARE FOR APPLE MACS

Garageband (free with all macs)   Logic X Pro (£199 - expensive but highly recommended)

OPTIONAL AUDIO SOFTWARE FOR PC's

MuLab 8 (€69) https://www.mutools.com/mulab-downloads.html

ABLETON LIVE essentials (£69) https://www.ableton.com/en/shop/live/

Task 6: Write a report

Explain and evaluate how you chose, recorded, arranged and finally produced the music 'The Options'. Refer to your initial choices. How successful were you? How could you still improve the end-product? [500 words max]