

A Level Music Technology



Summer Work 2020

The long summer holiday is a chance for you to relax and unwind after two years of preparing for, and taking, your GCSE exams. However, it is also a time to look ahead and think about how best to equip yourself for the Music Technology A Level course. Little and often is far more academically valuable than one massive cramming session the day before you start year 12.

The key areas you will need to address are:

The Key Principles of Music Technology

This involves you knowing the key features and characteristics of the equipment, software, and plugins you will be using, and being able to recognise them when heard on a track.

Task 1: Read the attached document "Key Principles of Music Technology, and make notes on its content.

Examples of the Key Principles we will be studying over the next 2 years includes:

- Microphones. Dynamics v Condenser, polar patterns, frequency response.
- EQ (including shelf, band and notch filters, LPF/HPF, cutoff frequency)
- MIDI (including editing, shaping, and quantising)
- Recording formats and techniques (Single mic, acoustic tape, ADAT, digital studio, DAWs etc)
- Compressors and Limiters
- Noise Gate
- Reverb (room, spring, wet, dry, etc.)
- Echo/Delay (delay time, feedback, mono vs stero, ping pong)
- Flange/Phaser and chorus
- Electric Guitar and Amps
- Commercial media formats (gramophone, cassette, CD, minidisk, mp3)
- Samplers and Drum machines
- Synthesisers (waveforms, ADSR, LFO, etc.) plus portamento/arpeggiator.
- Mixing desks
- Audio interfaces and DI boxes.
- De-essers
- Side-chain compression and "Ducking"
- Tremolo
- Vocoder and Talk Box
- Wahwah
- Overdrive and Distortion
- Speakers and monitoring equipment
- Mic techniques: single/multiple, polar patterns, placement distance and angle.
- Issues with recording: Spill, plosives, hiss, line level, and proximity effect.
- Sound waves, including amplitude, frequency, and noise cancellation.

Task 2: Go through ALL of the Key Principles listed above, and create a detailed document for each of them, describing what they are, and how they work. Use the Key Principles booklet and your own research.

Commercial Media Formats

- Wax Cylinder
- Shellac Disk/Vinyl
- Analogue Tape (Cassette tape, 8-track, etc.)
- Compact Discs
- Minidisk
- MP3 and WAV formats
- Streaming services

Task 3: Research the key information, and then create a timeline based on Commercial media formats. E.g. when they were invented, how they work, and their benefits/limitations.

As well as knowing what the Key Principles are and how they work, it is also vital that you listen to lots of popular music and hear how these Key Principles impact the sound. You should have knowledge and understanding of the instruments, the sounds associated with them and the combination of instruments and voices used in the following styles:

Jazz ● Blues ● Rock 'N' Roll ● Rock ● Metal ● Punk ● Soul ● Disco and Funk ● Reggae ●
Acoustic and Folk ● Commercial Pop ● Urban ● Electronic and Dance ● Music for the Media
Computer Game and Film.

Task 4: Using your preferred music streaming service, create a playlist that includes at least 3 examples from each of the genres and sub-genres listed above.

Listen to these examples and see if you can identify any of the Key Principles of Music Technology you have learned about in the previous tasks.