

Higher Music Technology Concepts

What you need to be able to recognise and demonstrate understanding of when hearing a piece of music:

Technology Concepts			Music + Technology
Tech Terms	Processes	Controls & Effects	Styles/genres
Ambience Clipping File Compression Impedance Parameters Patch Track object velocity	ADSR (attack, decay, sustain, release) envelope Autotune Crossfade De-esser Filter Insert point Plug-ins Sample editor Sample frequency Sub-mix Threshold vocoder	Cut-off frequency Flanger Graphical EQ Harmoniser Low-pass and high pass filters Modulation controller Parametric EQ Phase/phaser Pitch shift Portamento Pre-fade, post-fade Shelving EQ Time compression Time expansion Q (bandwidth) Tremolo Triggering vibrato	20 th and 21 st century classical music Electro acoustic Indie Jazz funk New wave R 'n' B Reggae Soul World music
Music Concepts			
Melody/harmony	Rhythm/tempo	Texture/structure/form	Timbre/dynamics
Interval Inversion Relative major Relative minor	Irregular time signatures Time changes	Through composed	Accents Harmonics Phrase marks Staccato marks

Higher Music Technology Dictionary

✓	Concept	Definition
	20th & 21st century classical music	Music from western Europe, e.g. orchestras, choirs and operas, featuring adventurous ways of producing sounds and creating music.
	Accents	Dynamic markings that have an effect on the loudness of a note. An accented note is louder than a non-accented note.
	ADSR envelope	Attack, decay, sustain and release parameters of MIDI and virtual instruments which can be changed individually to create unique sounds.
	Ambience	The natural sound of the room or space.
	Autotune	Pitch correction that is used to tighten and tidy the pitch of the vocals of most commercially recorded music, or, when deliberately over-applied, for creative effect.
	Clipping	An undesired distortion that occurs when the audio level is too high.
	Crossfade	A seamless way of joining two different tracks, with one fading out as the other fades in.
	De-esser	A plug-in that can be used in a DAW to reduce frequencies affected by sibilance with compression.
	Electroacoustic	A genre of music that uses electronic devices to alter recordings of acoustic instruments or real life sounds.
	File compression	Where a file is converted into a different format to make the file size smaller, therefore easier and quicker to share. It causes a loss in audio quality.
	Filter	A tool that corrects, enhances or changes an audio signal by reducing or boosting certain frequency

		ranges.
	Flanger	Similar to phaser, a dramatic swirling or whooshing effect that is created by duplicating the original signal, adding a very short delay, and playing it back over the original.
	Graphical EQ	A control featuring a series of sliders where frequencies across the spectrum can be boosted or reduced.
	Harmonics	Quiet sounds that are produced by lightly touching a string in certain places as is it being bowed or plucked.
	Harmoniser	A type of pitch shifter that combines the shifted pitch with the original pitch to create two or more note harmony.
	High-pass filter	A type of shelving EQ that allows frequencies above the cut-off frequency to pass through, cutting out the lower frequencies.
	Impedance	The amount of resistance to the current flowing through an electronic device, measured in ohms.
	Insert point	Where a signal is moved from a mixing desk to an external processor, before being returned to the mix.
	Indie	Alternative rock music that originated in the United Kingdom and the United States in the 1980s.
	Interval	The inclusive distance between one note and another, counting upward from the lower note.
	Inversion	Taking a melody and turning it upside down.
	Irregular time signatures	Time signatures that cannot be divided into equal groupings of 2 or 3, e.g 5/4, 7/4, 5/8.
	Jazz Funk	A 1970s genre based on riffs that encompasses characteristics from jazz, soul and funk.
	Low-pass filter	A type of shelving EQ that allows frequencies below the cut-off frequency to pass through, cutting out the higher frequencies.

Modulation controller	A wheel or pedal that bends the pitch of a note on a synthesiser when moved, making it sound higher or lower.
New wave	A 1980s genre that evolved from punk, featuring prominent, catchy vocal lines, synthesisers and drum loops.
Parameters	Different settings on effects processors.
Parametric EQ	An equaliser that offers full control over individual frequency bands by adjusting three key parameters: gain (boost or cut), center frequency (the specific frequency being adjusted), and bandwidth (Q) (the range of frequencies affected).
Patch	A configured sound that can be used to quickly duplicate automated and other settings to a different track.
Phase/phaser	Similar to flanger, a subtle swirling effect that is created by using filters to create peaks and notches in the signal.
Phrase marks	Curved lines over or under a group of notes, indicating that the music should be played smoothly.
Pitch shift	A process where the pitch of a note is altered for creative or corrective purposes.
Plug-in	A software effect or process that changes the sound according to where it is placed in the signal chain.
Portamento	A sliding effect, allowing the one note to slide pitch into the next.
Post-fade	For sending signals to effects processors to ensure the level of the effect changes proportionally with the volume of the dry signal.
Pre-fade	Useful for monitoring, pre-fade is when the raw signal is sent back to the musician as they are recording, before it passes through the channel fader.

R'n'B	A genre of music that uses specific production techniques that blend traditional soulful elements with modern electronic and hip-hop influences, such as drum machines, synthesized beats, and pitch-corrected vocals.
Reggae	A genre originating in the 1950s that is characterised by a slow tempo, a strong emphasis on the downbeat, and a signature offbeat rhythm created by guitar or piano chords.
Relative major/minor	Music that changes tonality with a seamless transition, maintaining the same key signature.
Sample editor	A software tool used for the detailed manipulation and processing of individual audio files.
Sample frequency	The rate at which snapshots of audio are captured: high = better quality but larger file size.
Shelving EQ	Used for broad tonal shaping, a control that boosts or cuts all frequencies either above or below a specific cutoff point.
Soul	Originating in the 1960s, a genre that is a combination of gospel, blues, and country music, characterised by gospel-influenced vocals, a strong rhythm section, and call-and-response patterns.
Staccato marks	Little dots above or below a note that indicate to a performer that the notes should be short and detached.
Submix	Where multiple audio tracks are combined into a single channel (bus), for processing as a group.
Threshold	A control on effects/processes that determines at what point the effect is applied to the signal.
Time compression	A process where the length of an audio clip is shortened, so it sounds faster.
Time expansion	A process where the length of an audio clip is increased, so it sounds slower.

Track object	Data that is recorded in the arrange window of a digital audio workstation.
Tremolo	An automated change in volume to produce a 'wobble' sound, created by turning the volume of the signal up and down quickly.
Triggering	When audio from one track is used to activate another.
Through composed	Where the structure of the music has new music for every line, with little or no repetition.
Velocity	A parameter in MIDI, describing the force with which a note is played.
Vibrato	A change in pitch, sometimes using a modulation control, to create a 'wobble' to a note.
Vocoder	A keyboard instrument that controls the pitch of a vocal sound.
World music	A genre that includes the use of traditional and modern technologies to record, produce, and distribute the diverse musical styles of cultures from around the globe.

