

Making Music

Playing, writing and producing music



SONG WRITING

Song writing is a creative outlet which can help you express emotions, convey messages and immerse listeners into feeling and understanding new perspectives. It can be a therapeutic and fun. Song writing involves writing poetic lyrics and making rhythmic musical compositions.

Song writing is choices about words, rhythm and sound using your 'musical compass'
'4 simple steps to writing a song' : https://www.youtube.com/watch?v=u0K_xcSqhxQ

Hip Hop Production: How to arrange beats <https://www.youtube.com/watch?v=YxKORwf69xI>

Writing Lyrics

Writing Lyrics involves using poetic techniques to create parts in particular structures (ie. verse, chorus, bridge) to form a song.

Poetic Techniques

Songwriting uses poetic techniques to construct a story which can be performed by artists. Some of the most used poetic devices used in music include:

Rhyme – Words ending with similar sounds

You better lose yourself in the music, the moment
You own it, you better never let it go
Lose Yourself – Eminem

Alliteration – repetition of a consonant sound/letter at the start of multiple words

And I'm so sick of love songs
So tired of tears
So Sick – Neyo

Similes – comparison of two different things using "like" or "as"

Shine bright like a diamond
Diamonds - Rhianna

Metaphors – comparing two different things, stating that one "is" something else

My heart's a stereo
It beats for you, so listen close
Stereo Hearts – Gym Class Heroes ft Adam Levine

Hyperbole – extreme exaggeration

Cause you know I'd walk a thousand miles
If I could just see you tonight
A Thousand Miles – Vanessa Carlton

Repetition – repeating certain words or phrases

Around the world, around the world
Around the world – Daft Punk

Assonance – repetition of the same vowel sounds

Lately I been, I been losing sleep
Dreaming about the things that we could be
Counting Stars - OneRepublic

Consonance – repetition of the same consonant sounds

I need no permission, did I mention
Single Ladies - Beyonce

Imagery/Symbolism – a mental image appealing to senses

Oh, her eyes, her eyes
Make the stars look like they're not shinin'
Just The Way You Are - Bruno Mars

Onomatopoeia – words that sound like their meanings

This beat go boom boom pow
Boom Boom Pow - The Black Eyed Peas

Personification – Giving human- type traits to non-humans

Cause I'd get a thousand hugs
From ten thousand lightning bugs
Fireflies – Owl City

Literary Devices Rap - <https://www.youtube.com/watch?v=uCMniNKxLFk&feature=share>

Poetic Devices Defined - <https://www.youtube.com/watch?v=qn4P3tvKNAg&t>

Song Structure in Western Pop Music

Songs in western pop music generally use set parts including an introduction, verse, pre-chorus, chorus bridge and outro.

An **introduction** generally establishes the melody of the song without lyrics

A **verse** sets the scene by providing context to the song

A **pre-chorus** builds up tension before reaching the chorus

A **chorus** summarises the main message of the song

A **bridge** creates the most tension as it builds up for the final chorus

An **outro** is like the introduction which establishes the melody without lyrics

Popular Song Structure								
Introduction	Verse	Pre-Chorus	Chorus	Verse	Pre-Chorus	Chorus	Bridge	Chorus

Learn Popular Music Structure - <https://www.youtube.com/watch?v=oXifpcE7ewU>

SONG ANALYSIS ACTIVITY

Look at the songs in the Folk Law Songbook and analyse their lyrics and song structure.

Look up the lyrics to your favourite song and analyse its song structure.

MUSIC BASICS

Pitch

In music, a note is a sound. A note that sounds higher or lower than another is said to have a higher or lower pitch.

Melody

On a guitar or ukulele you sharpen or flatten the pitch by sliding your finger up or down the string to the next fret.

Different scales will have different sharps or flats. For example, a G major scale has the notes G A B C D E F# G.

Harmony

Harmony refers to notes played together at the same time, and which sound like they 'fit'. In music there is often a movement from notes that sound tense together, towards notes that may sound more 'pleasing' to some and seem to 'fit' together. However harmony is very complex and varies between different cultural styles of music.

Elements of Music - <https://www.youtube.com/watch?v=qBXE9BkidNQ>

Chords

Voices singing or musical instruments playing together, create chords. A chord is a set of three or more notes played or sung together.

Major chords are made up of the 1st, 3rd and 5th notes of a scale. So in the C scale, which has the notes C D E F G A B C, a C major chord is the notes C, E, G. The F chord is F, A, C and the G chord is G,B,D.

A minor chord is where the third note is played slightly lower (flatter) in pitch. So a C minor chord would be the notes C, Eb (E flat) and G. This flattened 3rd note gives the chord a 'minor' or 'bluesy' sound.

A chord progression is a series of chord changes which shift the level of the song. In modern Western music many popular songs are based around just three chords. Chords often change on the beat and this adds to the rhythm of the song.

A melody is the tune of the song and is made up of notes of different pitches and rhythm. Melodies are often musical phrases which are repeated during the song.

Rhythm and Beat

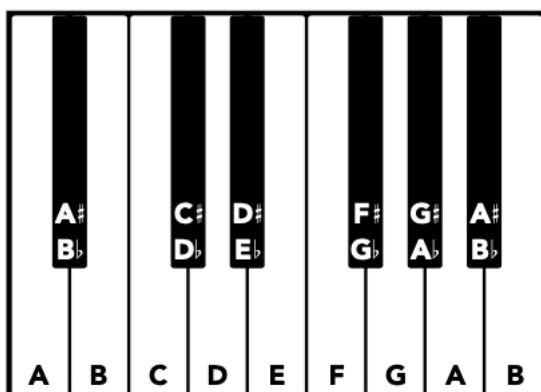
The 'beat' or pulse of a song is the steady underlying rhythm – the thing you tap your feet to. The 'rhythm' is the pattern of the beats made by the melody or music.

Scales

Music scales are made up of different notes. The C major scale (or 'key' of C) has the notes C D E F G A B C in its scale. These are all the white keys on a piano.

Other scales have sharps (#) or flats (b). A sharp means the pitch is raised. A flat is lowering the pitch.

On a piano each note is a half tone (semitone) apart. A sharp is the black note just above the white note below it. It is 'shaper', or higher, in pitch by half a tone. A 'flat' is the black note directly below the white note. It is 'flatter', or lower, in pitch by half a tone. Where there are two white notes together on the piano, with no black note in-between (between B and C and E and F), they are still half a tone apart.



Music styles or genres

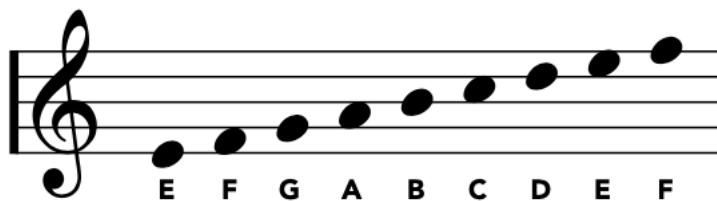
The style or genre of a song emerges from its history and the rhythm, melody and harmony of the music.

Blues music is based on what's called a 1, 4, 5 chord progression. This means the chords are based on the 1st, 4th and 5th notes of the scale and usually move in a pattern from 1 to 4 to 5.

So for a Blues in the key of C, you would look at the notes in the key (or scale) of C (C D E F G A B C) and play around the chords on the 1st, 4th and 5th notes of that scale. So you would have C as the first chord (1) and then move to the 4th chord (F chord) and then to the 5th chord (G chord). The song in the first section of this Songbook, 'Law Rules', is a 'Blues' song in the key of C.

Musical Notation

Musical notation is the music written down. It shows whether the pitch is going up or down and how long to hold each note. The notes are on lines and spaces. The line on the bottom in the image below is the E note. The space above that is the F note, and so on.



The time signature shows the number of beats in each bar and which note is one beat. So a 3/4 time means there's 3 one quarter notes in each bar. The rhythm would go one two three, one two three with the 'one' being emphasized.



The key signature shows whether notes are natural or sharps (#) or flats (b). So where the song is in the key of C (CDEFGABC) there are no sharps or flats. In the key of G the scale starts on a G and goes up G A B C D E F# G. There is an F# written on the staff lines.



The pitch of each note is indicated by where it is on the lines. Over the page is the melody line of 'Law Rules', the third song in the Songbook. Circles and stems on the lines and spaces indicate how long the note is. Squiggles and small rectangle boxes indicate rests of different length.

The chords that are to be played along with the melody are noted on the top of the staff lines. In 'Law Rules' (below) from the 'Folk Law' album the C chord is written at the start and that is the chord played throughout the first line of the song.

In 'Stand Together', the last song in the Folk Law Songbook, the timing of the main voice melody line is more complex. Note also the chords above the lines. They are played by guitar on the Folk Law CD. The song is sung by a choir in three parts on the CD, so there would be different melody lines for the other voices. When sung together they harmonize.

Law Rules

Rob Lachowicz

C

Hey there peo - ple here's a story about the law It
 should be fair to all whe - ther you're rich or poor

Detailed description: This block contains the musical notation for the song 'Law Rules'. It features two staves of music in 4/4 time. The first staff begins with a treble clef, a key signature of one sharp (F#), and a common time signature (C). A 'C' chord symbol is placed above the first measure. The melody consists of quarter and eighth notes. The lyrics 'Hey there peo - ple here's a story about the law It' are written below the first staff. The second staff continues the melody with similar note values. The lyrics 'should be fair to all whe - ther you're rich or poor' are written below the second staff. The piece ends with a double bar line.

Stand Together

Rob Lachowicz

D Em7 G D

Voice Stand to - ge - ther, not a - lone mm mm

D G Em7 D

Vo. Stand to - ge - ther not a lone mm it's our home

D

Vo. Free - dom of speech of ex pre - ssion

A7

Vo. Free - dom of a - sso - ci - a tion Fo - llow

G D

Vo. a - ny re - li - gion or none at all

Detailed description: This block contains the musical notation for the song 'Stand Together'. It features five staves of music in 4/4 time. The first staff is for the main voice and has a treble clef, a key signature of one sharp (F#), and a common time signature (C). Chord symbols D, Em7, G, and D are placed above the first four measures. The lyrics 'Stand to - ge - ther, not a - lone mm mm' are written below. The second staff is for a vocal part, starting at measure 5. Chord symbols D, G, Em7, and D are placed above. The lyrics 'Stand to - ge - ther not a lone mm it's our home' are written below. The third staff is for another vocal part, starting at measure 9. Chord symbol D is placed above. The lyrics 'Free - dom of speech of ex pre - ssion' are written below. The fourth staff is for a vocal part, starting at measure 10. Chord symbol A7 is placed above. The lyrics 'Free - dom of a - sso - ci - a tion Fo - llow' are written below. The fifth staff is for a vocal part, starting at measure 11. Chord symbols G and D are placed above. The lyrics 'a - ny re - li - gion or none at all' are written below. The piece ends with a double bar line.

MAKING MUSIC

Chord Progressions

Chord progressions are the foundation of the feeling conveyed in the song. It supports the lyrics, melody and can work simultaneously with other instruments to create music. In western music, chord progressions in popular music are usually diatonic which means they use chords which exist within the scale.

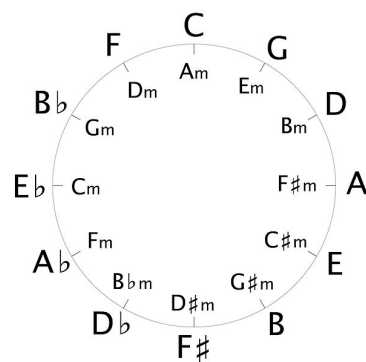
A Song in C Major has the following diatonic chords:

C Major Diatonic Chords						
1	2	3	4	5	6	7
I	ii	iii	IV	V	vi	vii
Major	Minor	Minor	Major	Major	Minor	Diminished
C	D	E	F	G	A	B

The 1, 4 and 5 chords are major. The 2, 3 and 6 chords are minor. The 7 chord is diminished.

A useful tool to determine which chords sound good with each other is the circle of 5ths.

Understand the Circle of Fifths - https://www.youtube.com/watch?v=_UxzDjU3-hM&t



https://commons.wikimedia.org/wiki/File:Circle_of_5ths_hires.jpg

Some popular western chord progressions include the 1 4 5 for Blues, the 2 5 1 for Jazz and the 1 6 4 5 for pop music.

Whilst using diatonic chords are most common, non-diatonic chords can be used to create unique progressions. This can be done through chord substitutions. An example of this is using a major chord where its relative minor chord should be.

Chord Progression Activity:

Try making your own progressions by experimenting with diatonic chords, using the circle of fifths.

Major - <https://www.youtube.com/watch?v=M8eItTv8QA&t>

Minor - <https://www.youtube.com/watch?v=j-j4g0ktPGw>

Improvisation Techniques

Songwriting requires Improvisation which is the spontaneous experimentation of musical elements to create music.

Rhythm – The element of time in music, which determines how long a sound/silence lasts (duration) and the speed of the beat (tempo).

Dynamics – How music sounds relative to itself, in relation to volume (quiet/loud) and articulation (soft/hard attack).

Techniques – All instruments have unique methods of playing that affect musical expression and sound produced (timbre). In guitar this includes using bends, vibrato, picking/strumming, hammer-ons, pull-offs, slides and palm muting.

Scales – Scales are a set of notes which can build melodies and harmonies. Around the world many types of scales are used to evoke different feelings including the Arabian Scale, Persian Scale, Egyptian Scale, Japanese Scale and Hungarian Gypsy Minor Scale.

In blues, rock and pop music, the minor pentatonic scale is used extensively for improvisation in guitar solos and forming melodies.

C Minor Pentatonic				
1	Flat 3rd	4	5	Flat 7th
Major	Minor	Major	Major	Diminished
C	Eb	F	G	Bb

Elements of Music - <https://www.youtube.com/watch?v=qBXE9BkidNQ>

Instruments

In western pop music, vocals, guitar, bass guitar, keyboard and drums are the most used instruments. Vocals are central to track because it helps create meaning and encourages listeners to sign along. Guitar can play a lead part to establish melodies or a rhythm part through chords. Bass guitar melds all the musical elements together by reinforcing the rhythm. Keyboards are versatile and can play the melody, chords backings and basslines.

Percussion has the important role of maintaining the timing of a song. They include instruments such as drum kits, djembes, congas and maracas. They can also be created from drum machines (Maschine, Launchpad), virtual studio instruments (VSTs), or acoustically through 'beatboxing' (making percussive sounds with your mouth to simulate drum sounds).

To learn more about drum rhythms, check out the 40 drum rudiments:

<https://vicfirth.zildjian.com/education/40-essential-rudiments.html>

Arrangement

Arrangement of instruments in a composition is important because all elements should support each other to convey a clear melodic/lyrical message. Depending on the genre, the arrangement of a song will vary.

Hip Hop Production: How to arrange beats <https://www.youtube.com/watch?v=YxKORwf69xl>

Beat Boxing

Beatboxing is making music sound effects through the body, using mainly the mouth, throat, and nose. It began in the hip-hop subculture in New York City in the 1980's.

Beginners Guide to Beatboxing: <https://www.humanbeatbox.com/articles/a-beginners-guide-to-beatboxing/>

Beat Boxing Activity

You can do basic beatbox by imitating parts of the drum kit. Try following the beat below by counting each beat in your head while verbally making sounds that replicate the kick (BUH), snare (KEH) and hi-hat (TEH).

Simple Boom Bap Beat								
Beat	1	2	3	4	5	6	7	8
Drum	Kick	Hi-Hat	Snare	Hi-Hat	Kick	Hi-Hat	Snare	Hi-Hat
Sound	BUH	TSK	KEH	TSK	BUH	TSK	KEH	TSK

Experiment with making your own beatboxing rhythms. To make a boom-bap hip-hop beat, keep the kick on the first beat and snare on the third beat. Try doubling or tripling sounds for some variation, whilst keeping in time by counting each beat in your head.

MUSIC PRODUCTION

Music production involves recording and editing (mixing/mastering) tracks to make a song.

Hardware

Music production requires the use of hardware including computers or portable devices, audio interfaces, microphones and midi instrument controllers.

Computers of various operating systems such as Windows/Mac have the capability to run music making software. Portable devices including phones and tablets running Android or IOS also have many applications for music production.

An audio interface is generally required to record audio which allows microphones and instruments to be connected to a computer. Audio interfaces provide different tonal characteristics such as warmth and clarity in the recordings.

Microphones come in various types which capture different frequency responses for specific purposes. Dynamic microphones like the Shure SM58, emphasize lower-middle frequencies resulting in warmer recordings. Condenser microphones like the Rode NT1-A, are generally used in studios due to their sensitivity to accurately capture all frequencies. Whilst these two categories of microphones are most common, other types such as ribbon microphones exist.

Midi instrument controllers such as keyboards and drum machines (Maschine, Launchpad) can also be used to improve workflow whilst providing realistic application. Native Instruments Maschine is used extensively by hip hop producers to create realistic drumbeats. Novation Launchpad is often used by EDM producers to trigger samples effectively and is useful for experimentation of musical arrangements.

Software

A Digital Audio Workstation (DAW) is the software used to record, mix and master music. There are many options depending on your computer (MAC/PC), budget and style of music you want to produce. Some of the most popular DAWs include *ProTools* and *Logic Pro X* for all-round music production, *FL Studio* for Hip-Hop and *Ableton* for Electronic Dance Music (EDM).

If you want to start out on Music production, some free computer software is available. Garageband (MAC) is a capable DAW which offers similar functionality as Logic Pro X, with the ability to record audio, mix and master. Audacity (MAC/PC) allows you to record audio, layer tracks and apply effects. Phone applications are also useful for beginning music production and capturing ideas. Some iOS applications include Garageband, iMaschine and Loopy HD. Some Android applications include BandLab, Walk Band – Multitrack Music and Music Maker JAM.

Recording

Recording is the process making a record of audio which can be played back or reproduced. DAWs functions directly record from audio interfaces as well as import/export audio files.

Looping

Looping involves continuously repeating a segment of an audio recording. Sound-on-sound looping is when additional phrases are layered on-top of the original recording. Looping helps create a backing and structure to a song whether in live performances or a studio recording.

More info: <https://blog.landr.com/looping/>

Mixing/Mastering

Editing in music production involves mixing and mastering. Mixing is altering the sound of audio tracks to balance their volume, frequencies, dynamics and spatial placement in the song. Mastering involves tweaking the sound of the entire song to ensure everything sounds even better, louder and ideal for all types of platforms (CDs/Streaming) and speakers. Both mixing and mastering involve using signal processing such as equalisation, compression, limiting, reverb and panning.

Equalisation involves adjusting the frequencies of a sound, to highlight properties such as warmth or clarity.

Compressors reduce the dynamic range between the loudest and quietest parts of the audio, to create a balanced signal that sits within the mix.

Limiters ensure the loudness of a recording do not exceed a certain volume, so the audio remains balanced.

Reverb creates a sense of space in audio mixes, as if the sound bounces off internal surfaces of a certain room environment.

Panning involves positioning sounds within the left to right spectrum of a stereo image.

More info: <https://blog.landr.com/audio-effects-plugins-guide/>

Sound Design

Sound Design involves making and editing sounds. It commonly involves using synthesizers whether they are hardware (hard) or software (soft) synths. There are many types of synthesizers including subtractive, additive, FM, sample-based, wavetable. Electronic Dance Music uses sound design extensively to create unique sounds.

More info: <https://reverb.com/au/news/10-types-of-synthesis>

PLAYING GUITAR AND UKULELE

Ukuleles are small, cheap and easy to play. They have been called 'the people's instrument'.

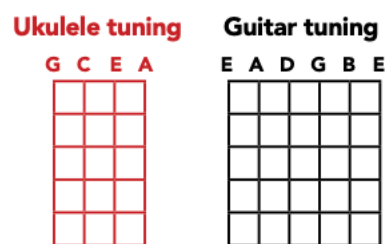
Guitars usually cost more but they can also be quickly learnt with practice.

Tuning

Strings are tuned by turning the knobs to tighten (sharpen) or loosen (flatten) the strings. There are free tuners online to help you tune up.

Ukuleles have 4 strings which are usually tuned to G, C, E, A. This means when the strings are strummed open (with no fingers down) then the notes G, C, E and A are being played.

The guitar has 6 strings which are tuned EADGBA.



Notes

To play notes on guitar or ukulele, press the tip of your finger on the string near, not on, the metal strips (frets).

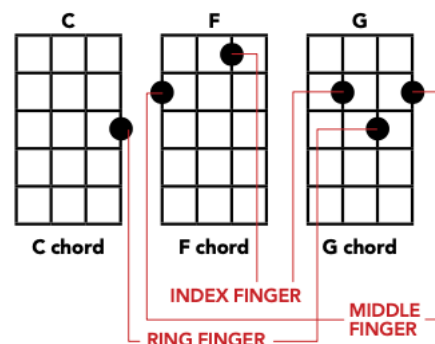
It's great practice to sing along with the note that you're playing so you get to know what the notes sound like and where they are on the fret board.

Chords

If you know a few simple chords you can play hundreds of songs. C, F and G chords are very common in a lot of popular music. The C major chord is made up of the 1st, 3rd and 5th notes of the C scale. So the C chord will be the C, E, G notes played together.

The C chord on a ukulele is played with the ring finger on the third fret of the 1st (A) string. All the other strings (G C E) are played open. The A string is made into a C by going up 3 frets from A to Bb to B to C. So the notes from left to right on the diagram are G C E C which are all notes of the C major chord.

The C chord is C, E, G. The F chord is F, A, C, and the G chord is G, B, D. Their shapes on the ukulele and guitar are shown in the diagrams.



Strumming and Timing

Strumming can be done: with a plastic pick; or by using your thumb or index finger for the down and up strokes, or by using your second and third fingers (middle and ring) on the downstroke and thumb on the up strokes. It's important to keep a loose relaxed strumming hand and keep your back straight.

Timing in music is critical. To practice, try counting 1, 2, 3, 4 while strumming down strokes on your guitar or ukulele. A 4 count is very common in a lot of popular music. After a while try 1and2and3and4and - with the 'and' being the up stroke. Start slowly and gradually speed up. To help keep timing you can use a metronome. There are free ones online.

Improvise

To improvise means to make something up as you go along. In music it is sometimes called 'jamming'. To improvise, you play along with a song and make it up so it fits in, but is something new. We usually improvise by using the notes of the 'key', which is similar to the scale. For example, for a song in the key of C we would use the notes of the C scale (C D E F G A B) to improvise.

ACTIVITY

'Jam' along on the ukulele or guitar with some of the Folk Law songs on the CD.

Make up your own song

** The ' Song Writing', 'Making Music' and 'Music Production', sections were written by John Oh as part of a Queensland University of Technology Law School Student Clinic placement with Refugee and Immigration Legal Service in 2020 for the 'Civics Rap' project.*