Beginning Music Theory

What You Really Need to Know When You Are Starting

Tommaso Zillio

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www.musictheoryforguitar.com

CONTENTS

CHAPTER 1

ALL THE BASICS

1.1 Notes

As you probably already know, there are 7 notes: A B C D E F G. These notes do NOT have the same 'distance' between one another. In fact, B and C have only one fret of distance of your guitar, and the same is true for E and F. All other pairs of consecutive notes have TWO frets of distance. The situation is thus:

A	·	B	C	·	D	·	E	F	·	G	·	A

(Remark how B-C and E-F are closer than the other notes). So, what are the dots between these notes? These are other notes, called *accidentals*. These notes take their name from one of the notes close by. For instance, the note that is between A and B can be called either "A sharp" (written A#, meaning "one fret above A"), or "B flat" (written Bb, meaning "one fret below B"). These two names are substantially equivalent — you can use either one. So the situation now is:

A	A#/B♭	B	C	C#/D♭	D	D#/E♭	E	F	F#/G♭	G	G#/A♭	A

See page 10 in this eBook for a strategy that will allow you to learn the notes over the fretboard of your guitar.

1.2 Scales

A scale is simply a collection of notes that sound good if played one after another. This definition leaves many possibilities open, however most composers of all times have found that there are two scales that sound "natural" to our ear: the major scale and the minor scale.

Major Scale

The major scale is the basis of all music theory. It is generally considered a "plain" or "happy" scale.
We build the major scale starting from a note we choose. This note will be called the "tonic" of the scale. From this note we will go up in pitch with the following steps: 2 2 1 2 2 2 1. Let us see an example to clarify.

1. We choose A as our tonic.
2. From A we go up 2 frets on your guitar, finding B.
3. From B we go up another 2 frets, finding C#.
4. From C# we go up only 1 fret (following the formula above) and we find D
5. From D we go up 2 frets to find E
6. From E we go up 2 frets to find F#
7. From F# we go up other 2 frets to find G#
8. Finally, from G# we go up one last fret, and we find A again.

Thus, the A major scale is made by the notes A, B, C#, D, E, F#, G#. You can apply the same procedure to any other tonic note to find any scale. In fact, on page 19 of this eBook you will find a table with the notes for all the major scales, so you won't need to do the whole procedure every time.

Minor Scale

The minor scale is generally considered "darker" and "sadder" than the major scale.

The minor scale works following a principle similar to the major scale, but with a different formula. For the minor scale the increments are 2 1 2 2 1 2 2. If we apply this formula taking A as our tonic note and following the same steps shown above for the major scale, then we find that the A minor scale is made by the notes: A B C D E F G. As for the major scales, you will find a table with the notes in all the minor scales on page 19.

1.3 Chords

Chords are sets of notes that sound good when played at the same time. You probably know already some chords shapes on your guitar. Now it is the time to see how chords are actually built.

Major and Minor Chords

Chords are built in the same way as scales: starting from a root note (the note that gives the name to the chord) and "going up" a set number of frets. Here we are going to talk only about major and minor chords. While there are many more types of chords, these two (major and minor) are enough to get you started and enough to play the majority of music that you know. Both major and minor chords are composed by 3 notes.

- To build a major chord, you need to go up 4 frets from the root and then 3 frets. For instance, a C major chord is made by C (the root note), E (4 frets higher than C) and G (3 frets higher than E).
- To build a minor chord, you proceed in a similar way, only you need to go up 3 frets first and then 4 frets. For instance a C minor chord is made by C (the root note), Eb (3 frets above the root), and G (4 frets above Eb).

In practice, if you wish to play a C Major chord, then you have to play all the 3 notes: C, E, and G.

While the procedure to find the notes of each chord is not difficult, it is quite lengthy to do it for every single chord. To save you some work, on page 21 there are two tables telling you what notes are in every major or minor chord. Quite handy, aha?

1.4 How Chords relate to Scales

Chords and Scales are related in a very specific way. Here are the principle that governs their relationship.

> *A Chord is said to be "in" a Scale (or a Scale is said to "contain" a Chord) if ALL the notes of the Chord are also in the Scale.*

For instance: the C major chord is made by the notes C, E, and G. The C major scale "contains" the C major chord, since the C major scale has C, E, and G in it. Is this the only scale that contains the C major chord? No, there are other five: F major, G major, A minor, D minor, E minor. All these scales

contain the notes C, E, and G, so all these scales contain the C major chord. As you can see, a single chord can be "in" more than one scale.

In the same way, a scale may contain (and in fact does contain) more than one chord. The C major scale, for instance, contains the following chords: C major, D minor, E minor, F major, G major, A minor, B diminished (the diminished chord is not explained in this eBook since its application is quite tricky, and can be safely ignored for now). How we were able to find this list of chords? Simply by trying and spelling all the chords, and then inspecting each one of them to see which ones are composed only by notes in the C major scale. As you see, this is quite a bit of work to do — but don't worry, since I already did all of it for you! The table on page 23 of this eBook shows all the chords in every key for all major and minor keys.

In the next section we are going to see what we can DO in practice with the basics we just learned.

CHAPTER 2

WHAT TO DO WITH THE BASICS

In this section we are going to see what you can actually do once you know the basics that I explained in the previous chapter. After all, there is no real reason to learn music theory if not for the applications to actual music. Let's se them!

2.1 Composing Songs (in Key)

Let's take the chords of the C major key: C Dm Em F G Am. (I am purposefully excluding the diminished chord since it does not sound that great and its use is quite tricky). As long as I use only these chord and I am starting and ending on the C major chord (the chord that gives the name to the key, which is always the first one, and it's called the *tonic chord*) then I can play ANY chord progression and it will sound good. Some examples here:

- C F G C
- C Am Dm G C
- C G Am F C
- C Em Am G C
- C Dm Am F G C

Now, try and write some chord progressions of your own! Once you find a chord progression that you like, you can write a melody over it (see next section) and just by doing this you have composed a song.

The beauty of it is that you can do exactly the same with ANY other key (D major, F minor, Ab minor...). As long as you use chords in the key, and you start and end on the tonic chord, then you will be fine! Again, you can find a table of all the chords for all keys on page 23 of this eBook.

Note: this "rule" should be intended more as a "suggestion", meaning that it IS possible to use chords that are out of key. On the other hand, the use of out-of-key chords is slightly more complicated, so we will not see it here.

In case you want to write the melody first and find the chords later, the procedure is slightly different (and a bit too long to write it here). If you want to know how to do it, please check out my FREE eBook on Harmonization at:
http://www.musictheoryforguitar.com/howtoharmonizeamelody.html

2.2 The Principle of Correspondence

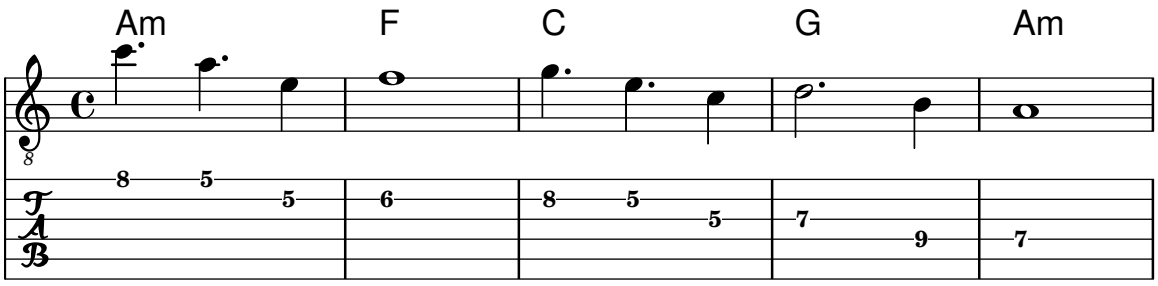
Ok, and now that we have a chord progression, what can we do with it? There is an important principle of correspondence between Harmony (i.e. the chords) and Melody in music that you should be aware of:

A Melody sounds "in" when it uses the notes that are in the chord that is playing

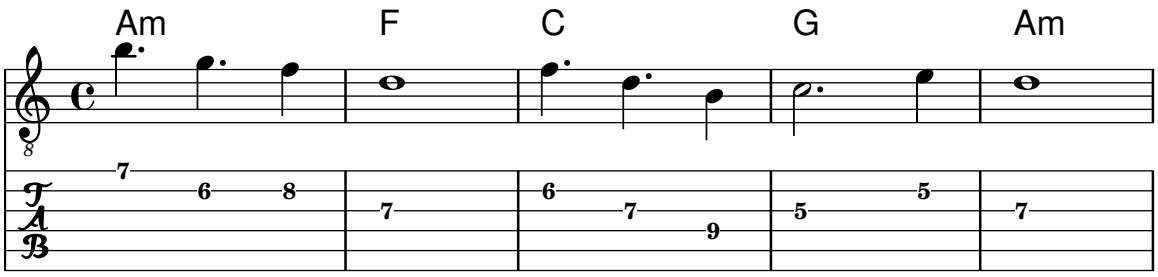
2.3 Chord Note Soloing

Following the The Principle of Correspondence, if we want to solo over a chord progression and have the solo sound "in", then we need to use mainly chord notes in our solo. This rule is not to be take too literally: you can certainly use notes that are not in the chord every now and then, but notes that are held for a long time (such as the notes at the end of a phrase) need to be in the chord.

As they say, an example is worth a thousand words, so here is a sound example for Sounding "in" (i.e. using ONLY chord notes:
Click here to hear Example 1



While here you can hear what it means to sound "out" (not using chord notes at all).
Click here to hear Example 2:



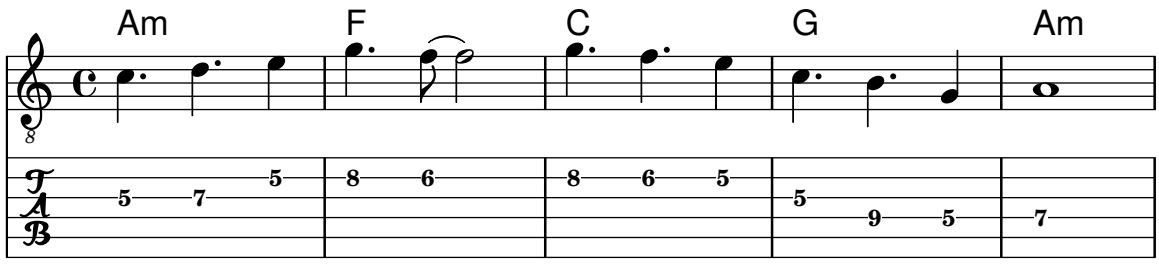
These two examples are kind of extreme: in them the notes are either all

in or all out. In real music, we usually prefer to mix the two situations in a controlled way: this means we need to be able to control the dissonance.

2.4 Dissonance

What if we decide that we want to "break the rules" so to speak? What if we want our solo/melody to sound "out" of the chord progression?

Here is an example using the same chord progression as above.
Click here to hear Example 3:



As you see, I'm using "wrong" notes, but just after I use them I move to the "right" notes, the notes that are in the chord. This procedure (following a wrong by a right one) is called "resolving the dissonance". In other words: a "wrong" note by itself does not sound good in general. A "wrong", immediately followed by a "right" note DOES sound good.

CHAPTER 3

HOW TO TRAIN

Ok, this is all nice and good, but what you actually *need to do* in order to unleash the power of the theory you just learned? You need to train, young Padawan. And if you train with diligence and consistency (i.e. every day!) you will be able to use all the theory I just explain without even thinking, and sooner than you imagine! To help you better, I will explain some of the training systems I used for myself and I routinely use for my students.

3.1 How to Learn the Notes on the Fretboard

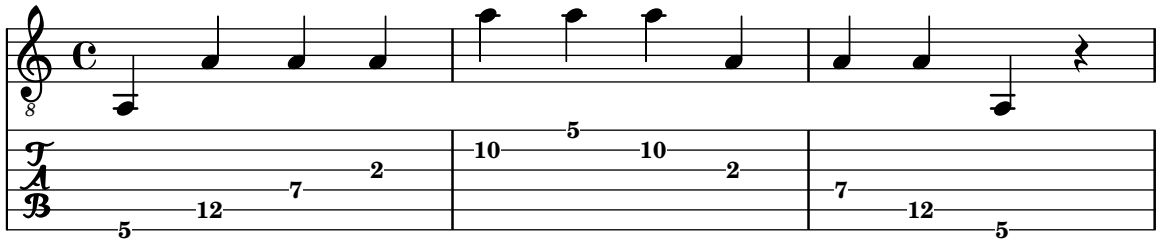
Learning all the notes on your guitar may seem like an impossible task. It is not. Of course, I'm NOT just telling you to take a chart of the notes on the fretboard and to learn it by heart, and then leave you to deal with it alone. No, here it is an exercise that I use with all my students and that has had so far a 100% of success with them. The whole procedure requires slightly more than a month of training (only 5 minutes per day) and once done it's permanent: you will just KNOW the notes over all the fretboard.

Phase One

First, choose a natural note (either A, B, C, D, E, F, or G). Then proceed to find this note over every string but:

- Do not use open strings
- Do not play above the 12th fret

Under these conditions, every note will appear once and only once per string. Then, proceed to play this note on the guitar following the order of the strings. For instance, If choosing the note A, I would play this:
Click here to hear Example 4



Note that I'm not using the open 5th string, but I'm playing my A at the 12th fret.

Your task is to do this for ONE note per day. You are successful when you can play the pattern up and down for 3 times in a row without errors. There are 7 notes, as there are 7 days in a week. You can play all notes this way in a week investing only few minutes. Do not be concerned if you can not remember the pattern for each note — nobody can do it consciously. The pattern is not our goal, our goal is to learn the notes. Just play the patters as explained and trust me.

After 2-3 weeks of phase 1, pass at phase 2:

Phase Two

Do another week of the same practice, but this time use a metronome set at 40 BPM, and play one note per beat. The metronome adds a stress element to your practice. This will force you finger to "think for themselves"

while doing this exercise. After a week of metronome, you can finally pass at phase 3:

Phase Three

Using the metronome at 40 BPM, play the patterns for ALL these notes, one after the other without stopping: A E B F C G D. You will NOT be able to do this if you haven't done phase 1 and 2 above. On the other hand, if you HAVE practiced through phase 1 and 2, you will find that this phase requires some concentration, but it is by no means impossible.

At this point, start increasing the speed of the metronome. You can also have a friend calling out random notes as you play. You will notice that now you still struggle to remember the patterns for each note, but somehow the notes themselves are magically clear in your mind. You will NEVER forget them again in your life.

And how about the accidentals? (i.e. the "sharp and flat" notes). They will always be one fret of distance at most from a natural note, and the moment that you will know your natural notes, the accidentals will come for free.

One final note: no technique works if not applied. Reading this and not doing anything will not help you in learning the notes. It is not as difficult as it seems. Just get started and you will surprise yourself.

3.2 Chord Tone Soloing

At this point you may think that being able to play a solo using notes in the chord is exceedingly difficult, or even impossible. After all, you need to:

1. Know the chord progression (and keep track of it while playing)
2. Know the notes in each of the chords

3. Find these notes on the fretboard, and

4. Actually playing them!

Now, I want you to realize that none of these things are difficult per se. They seem difficult because:

- They are unfamiliar to you
- You are doing them all together!

This means that you need to make each of this step a familiar one, and that you need to do it for one step at a time. I explained above how to train your note knowledge on the fretboard. Here is what I suggest for the chord note soloing:

1. Take a big piece of paper, and at the top write your chord progression. (Say: Am G). This will help you keep track of the chord progression. Start with a short chord progression! Two chords are enough at the beginning. You can use a longer progression later.

2. Just under each chord, write the notes for that chord. (under Am write: A, C, E. Under G write: G, B, D). This way you won't need to think what notes are in what chords in real time. Consult the table at page 21 to find the notes for each chord.

3. Restrict yourself on a small zone of the fretboard (say, from fret 5 to 8, only the first 3 strings). Now find all the notes you have written in this zone. (where are all the A's? All the B's? etc . . .)

4. At this point you can start playing! Record your chord progression, and use it as backing track. Make sure to start by hitting only chord

notes. Whenever you want to use a dissonance, as explained above, make sure you are doing it deliberately and not by mistake!

By breaking the problem step-by-step and using such advanced technology as pen and paper, you will be able to start soloing using chord tones. After a while, change the area of the fretboard you are working on.

After some more practice time, you will know your chord progression by heart (and the notes in each chord too). At this point start again with a new chord progression. In time you will memorize all the notes in all the chords just because you are using them.

Do not sit down and try to memorize all the tables in this document by heart. This will not work. You will be able to memorize and retain everything only by application, as I just described. And when you will hear how good it sounds to get the "right" notes in your solos, you will start having fun too!

CHAPTER 4

WHAT'S NEXT?

"Ok, I learned all this cool theory stuff on how to put chords and melodies together. What is my next step?"

At **musictheoryforguitar.com** we want to help you get better at music.

We want to help you become a more creative guitar player and a better musician overall - so that you can play better, improvise better, and write better songs.

Music theory is the 'secret sauce' that pro musicians use (and downplay when talking to their fans). We want you to learn music theory in a usable way — not rote memorization.

And we want it to be FUN!

If you are hungry for more, you can come and check out our website for more free articles and videos...

...but if you want more help and are ready to take the next step, then check out our comprehensive music theory courses, made specifically for guitar players:

Complete Chord Mastery

Complete Chord Mastery is the course you want to take if:

- Your focus is on **rhythm guitar.**
- You want to learn harmony on the guitar fretboard.
- You are interested in **songwriting and composition.**

It's a course for both beginner and advanced players.

If you're like most guitar players, you might still be struggling to master chords and chord progressions everywhere on the guitar. Hey, I've been there too, we all have. It seems like there is soooo much stuff to learn, and it would take a lifetime to learn it all! That's what I used to think. It was so frustrating.

...but what I've found is there are people in this world who have mastered chords and harmony and it didn't take that long to do. They aren't any smarter or more talented than you or I.

I've developed a simple – but complete – harmony system that I use with my own real-life students. This system takes out the mystery from the guitar so that they can learn, understand and (fluently) play all sorts of chords in a short time.

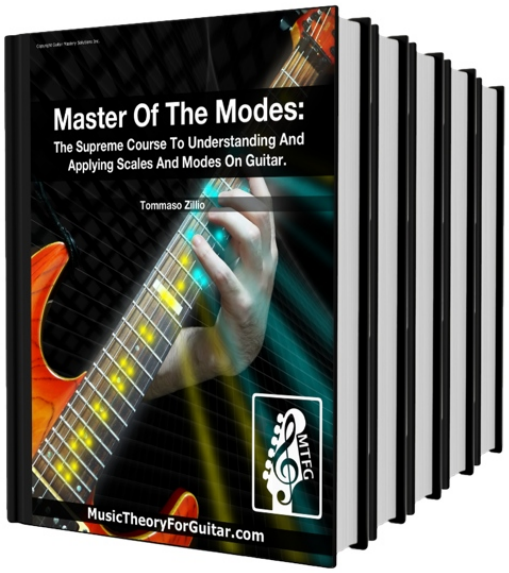
You too will be able to play any chord, from simple to very advanced, all over the fretboard, in any position, inversion or voicing.

You too can learn how to understand and apply chords and harmony on guitar. You will be able to write cool chord progression - the kind that make people say "what did he just play?".

You will be able to use complex chords without even thinking. You will be able to play awesome rhythm parts on your guitar in any style YOU want!

https://www.musictheoryforguitar.com/chords-and-harmony-guitar-lessons.html

Master Of The Modes



Master Of The Modes is the course you want if:

- You want to focus on **lead guitar** playing.
- You want to completely master the guitar fretboard
- You want be able to **improvise** over ANY backing track or chord progression

It's a course for both beginner and advanced players.

Some guitar players seem to create unique, creative and awesome guitar solos. Somehow, being creative just comes easy for them. How do they do it? They have mastered how be creative with scales & modes on guitar... and with this I don't mean a bunch of scale patterns thrown together: I mean REAL musical insight.

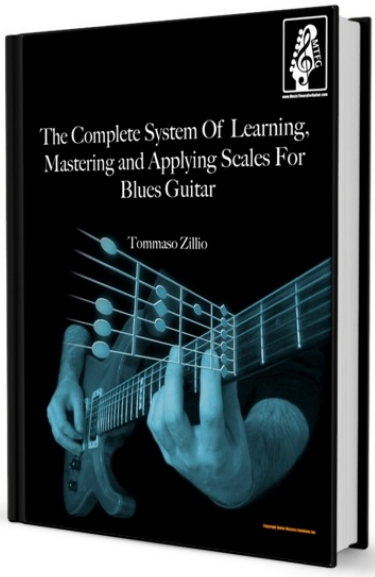
Scales and modes are one of the most difficult (and controversial) topic in music theory... To make them easy-to-understand you need a simple and consistent system. A system for learning, mastering, and actually using scales and modes in real music without any limitations.

Armed with the core knowledge of Master of the Modes, you will learn and connect all there is to know about the modes. And yes, together we will use everything you are going to learn to play real music.

Learn how to finally master completely scales and modes on guitar. Learn a system that is musically useful and will help you to write, improvise, and play the music YOU want to play!

http://www.musictheoryforguitar.com/scalesandmodesguitarlessons.html

Scales For Blues Guitar



Scales for Blues Guitar is the course you want to take if you want to focus on pentatonic Blues and Classic Rock leads.

- You hear great Blues players creating solos that sound amazing but have no idea how to do it by yourself?
- Do you struggle in playing the Blues in all keys and over all the fretboard (as opposed in just one basic position)?
- Are you thinking too much about "what to play next"? Wouldn't you rather than let your emotions speak through your playing?

If you have answered "yes" to any of the questions above, then you need to learn how music theory applies to Blues. And you need to understand how to use this knowledge into your guitar playing in an effective way.

Here's how to finally master all the scales for Blues guitar. Get rid of your frustration and lack of confidence once and for all. Learn how to play Blues from your heart!

http://musictheoryforguitar.com/scalesforbluesguitar.html

Private Sessions

For people who need 1-on-1 attention with their music theory. These are intense private sessions that focus on the topics you need in your music theory development.

If you need help on topics that are not covered in the courses, or you need special feedback, then these **Private 1-On-1 Music Theory Lessons** are the option for you.

https://www.musictheoryforguitar.com/private-lessons.html

APPENDIX A

TABLES OF NOTES IN A GIVEN SCALE

Major Scales:

Key	Notes						
	1	2	3	4	5	6	7
C	C	D	E	F	G	A	B
Db	Db	Eb	F	Gb	Ab	Bb	C
D	D	E	F#	G	A	B	C#
Eb	Eb	F	G	Ab	Bb	C	D
E	E	F#	G#	A	B	C#	D#
F	F	G	A	Bb	C	D	E
Gb	Gb	Ab	Bb	Cb	Db	Eb	F
G	G	A	B	C	D	E	F#
Ab	Ab	Bb	C	Db	Eb	F	G
A	A	B	C#	D	E	F#	G#
Bb	Bb	C	D	Eb	F	G	A
B	B	C#	D#	E	F#	G#	A#

Minor Scales:

Key	Notes						
	1	2	b3	4	5	b6	b7
Cm	C	D	Eb	F	G	Ab	Bb
C#m	C#	D#	E	F#	G#	A	B
Dm	D	E	F	G	A	Bb	C
Ebm	Eb	F	Gb	Ab	Bb	Cb	Db
Em	E	F#	G	A	B	C	D
Fm	F	G	Ab	Bb	C	Db	Eb
F#m	F#	G#	A	B	C#	D	E
Gm	G	A	Bb	C	D	Eb	F
G#m	G#	A#	B	C#	D#	E	F#
Am	A	B	C	D	E	F	G
Bbm	Bb	C	Db	Eb	F	Gb	Ab
Bm	B	C#	D	E	F#	G	A

APPENDIX B

TABLES OF NOTES IN A GIVEN CHORD

Major chords:

Chord	Note		
	1	3	5
C	C	E	G
Db	Db	F	Ab
D	D	F#	A
Eb	Eb	G	Bb
E	E	G#	B
F	F	A	C
Gb	Gb	Bb	Db
G	G	B	D
Ab	Ab	C	Eb
A	A	C#	E
Bb	Bb	D	F
B	B	D#	F#

Minor chords:

Chord	Note		
	1	b3	5
Cm	C	Eb	G
C#m	C#	E	G#
Dm	D	F	A
Ebm	Eb	Gb	Bb
Em	E	G	B
Fm	F	Ab	C
F#m	F#	A	C#
Gm	G	Bb	D
G#m	G#	B	D#
Am	A	C	E
Bbm	Bb	Db	F
Bm	B	D	F#

APPENDIX C

TABLES OF CHORDS IN A GIVEN KEY

Major Keys:

Key	Chords						
	I	ii	iii	IV	V	vi	vii°
C	C	Dm	Em	F	G	Am	Bdim
Db	Db	Ebm	Fm	Gb	Ab	Bbm	Cdim
D	D	Em	F#m	G	A	Bm	C#dim
Eb	Eb	Fm	Gm	Ab	Bb	Cm	Ddim
E	E	F#m	G#m	A	B	C#m	D#dim
F	F	Gm	Am	Bb	C	Dm	Edim
Gb	Gb	Abm	Bbm	Cb	Db	Ebm	Fdim
G	G	Am	Bm	C	D	Em	F#dim
Ab	Ab	Bbm	Cm	Db	Eb	Fm	Gdim
A	A	Bm	C#m	D	E	F#m	G#dim
Bb	Bb	Cm	Dm	Eb	F	Gm	Adim
B	B	C#m	D#m	E	F#	G#m	A#dim

Minor Keys:

Key	Chords						
	i	ii°	bIII	iv	v	bVI	bVII
Cm	Cm	Ddim	Eb	Fm	Gm	Ab	Bb
C#m	C#m	D#dim	E	F#m	G#m	A	B
Dm	Dm	Edim	F	Gm	Am	Bb	C
Ebm	Ebm	Fdim	Gb	Abm	Bbm	Cb	Db
Em	Em	F#dim	G	Am	Bm	C	D
Fm	Fm	Gdim	Ab	Bbm	Cm	Db	Eb
F#m	F#m	G#dim	A	Bm	C#m	D	E
Gm	Gm	Adim	Bb	Cm	Dm	Eb	F
G#m	G#m	A#dim	B	C#m	D#m	E	F#
Am	Am	Bdim	C	Dm	Em	F	G
Bbm	Bbm	Cdim	Db	Ebm	Fm	Gb	Ab
Bm	Bm	C#dim	D	Em	F#m	G	A

About the Author

Tommaso Zillio is a recording artist, composer, session guitarist, guitar trainer and instructional author.

His expertise as a teacher is on training guitar players on how to use music theory to create their own style and express themselves. His main focus is on helping guitar players thinking both inside and outside the box and to eliminate anything that can restrict their free expression on the instrument.

Tommaso holds a PhD in Theoretical Physics from the International School of Advanced Studies (SISSA/ISAS) in Trieste, Italy. He has been a Postdoctoral Fellow with the Smithsonian and to date he has published a dozen peer-reviewed research articles on topics ranging from Physics to Ecology.

Tommaso's influences are very varied, expressing the love of music that transcends genera and instruments. Some of his favorite musicians are: Dream Theater, Pink Floyd, Joe Satriani, Andy Timmons, Mike Oldfield, Jean-Michel Jarre, Nightwish, Astor Piazzolla, John Williams, Gustav Holst, Sergei Rachmaninoff.

Tommaso is a graduate of Tom Hess's Music Careers Mentoring Program and is a charter member of the Elite Guitar Teachers Inner Circle. He earned the esteemed "Elite Master Guitar Teacher" title given to less than 10 guitar teachers world wide to date.

For more info about Tommaso, or to contact him, go to:
https://www.musictheoryforguitar.com/abouttommasozillio.html.