



THE
ULTIMATE
THEORY
CRASH COURSE
FOR BASS PLAYERS

COURSE BOOK

SCOTTSBASSLESSONS.COM

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Introduction



Looking to take your bass playing to the next level and increase your playing confidence? Join Scott Devine as he dives into the basic concepts of music theory.

In Lesson 1, you'll learn the Number System for naming chords, and why it's so important. Lesson 2 covers the seven Modes and how to use and approach each one. And in Lesson 3, we'll discuss the "3 Shape Rule" to help you play fluidly over the *entire* fretboard.

Lesson 01

Fundamental Concepts

Let's briefly look at a few very important concepts that every bass player needs to understand:

01. Bass Players Play Chords, too.

Guitar players play chords. Keyboardists play chords. What about us bass players? Well, we play chords, too! But we play chords by using **arpeggios** (also referred to as chord tones) to *outline* the chord, rather than playing all the notes of the chord at once.



"If we don't know how to outline the chords, we can't do our job."

02. The Major Scale is the Operating System.

Would it surprise you to know that in music, there's an "operating system?" Not only does it give songwriters a set of tools and a system to work from, it's the foundation of *diatonic harmony*. And 99.9% of the songs in Western music you've ever heard are grounded in it. It's called the **major scale**.

All the different scales that appear in music—the major and minor scales, all the modes, the pentatonic scales, etc.—are derived from the major scale. Understanding and learning this scale and all that is contained within it is crucial to your development as a bassist, and that's where the Number System comes into play.

di•a•ton•ic / ,dī-ə-'tä-nik / *adj.* notes that are part of a key center

LESSON 01 (continued)

The Number System

The Number System is a simple and efficient way professional musicians use to communicate with each other about a song's chord structure. Let's start by looking at the C Major Scale:

Example 01

Example 01 shows the C Major Scale in bass clef, 4/4 time. The scale is written across two staves. The first staff shows the notes: C2, C3, D3, E3, F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5. The second staff shows the fret numbers for each note: 8, 10, 7, 8, 10, 7, 9, 10, 9, 7, 10, 8, 7, 10, 8.

We combine notes of the major scale in a specific order to create chords like the ones written below in Example 02. This is called *harmonization** of the major scale.

You'll want to memorize this sequence and order of major7–minor7–minor7–major7–dominant7–minor7–minor7b5–major7, as we explain further.

Example 02

Example 02 shows the C Major Scale harmonization in bass clef, 4/4 time. The scale is written across two staves. The first staff shows the notes: C2, C3, D3, E3, F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5. The second staff shows the fret numbers for each note: 4, 5, 7, 9, 10, 12, 14, 16, 2, 3, 5, 7, 8, 10, 12, 14, 15.

continued →

*For an in-depth explanation of **major scale harmonization**, check out

"FUNCTIONAL THEORY FOR BASSISTS VOL. 1" in the SBL Academy courses.

LESSON 01 (continued)

To use the Number System, we substitute numbers for the scale degree (and by convention use Roman numerals), *capitalize* the number of the major and dominant chords, and use *lower case* for the number of minor and diminished chords. The chord sequence becomes:

I maj7 – ii 7 – iii 7 – IV maj7 – V 7 – vi 7 – vii m7^b5

This sequence of major, minor and diminished chords **remains the same for any major key**: the “**I**” chord is *always* a major 7 chord, the “**ii**” chord is *always* a minor 7 chord, the “**V**” chord is *always* a dominant 7 chord, etc. And this is a **moveable system**—all you need to know is the root note and the chords follow.

Creating an “Instant Song”

Let’s say we’re going to play in the key of C Major. Someone calls out a **I–IV–V–ii**. What are the chords we should play? Well we should immediately know that the **I**, **IV**, and **V** chords are major, and the **ii** chord is minor. In C Major, the **I** is a C, the **ii** is a D, the **IV** is an F, and the **V** is a G. Our chords are then:

Cmaj7 – Fmaj7 – G7 – Dm7

And here’s our song. Choose a rhythm of your own, and play as many times as you’d like:

Example 03

Cmaj7	Fmaj7	G7	Dm7
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But what about a melody? Simply play the notes of the C Major Scale, they’ll all work!



“If you’re learning songs from a bass player’s perspective, it’s so important that you understand this system, because all the songs that you play will plug into this system.”

Lesson 02

The Modes a.k.a. Chord Scales

In Lesson 1, we discussed the *notes* of the major scale, and then the *chords* associated with each note of the major scale. The **modes** are the next step, since they represent the perfect scale to play over a particular chord. So, rather than refer to the modes as “modes,” let’s choose another descriptor for them: **chord scales**.

The chord scales (modes) are derived simply by starting the major scale on different degrees of the scale:

Degree	Name	Start/End
1	Ionian (Major Scale)	Root → Root
2	Dorian	2nd → 2nd
3	Phrygian	3rd → 3rd
4	Lydian	4th → 4th
5	Mixolydian	5th → 5th
6	Aeolian (Natural Minor)	6th → 6th
7	Locrian	7th → 7th

So as an example, in the key of C Major, if someone asked what chord scale to play over an Em7, we recognize that an E note is the third of the C Major Scale and its associated chord is an Em7, so we’d play the chord scale associated with the **iii** chord—the E Phrygian Scale. An Fmaj7 chord? The F Lydian Scale, etc.

Let’s tie it all together:

	Scale Degree						
	1	2	3	4	5	6	7
Chord Type:	I maj7	ii m7	iii m7	IV maj7	V7	vi m7	vii m7^{b5}
Chord Scale:	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Locrian



“If you know the major scale, and its basic pattern, you can work out all of the fingerings for all of the chord scales (modes) just based off that one pattern.”

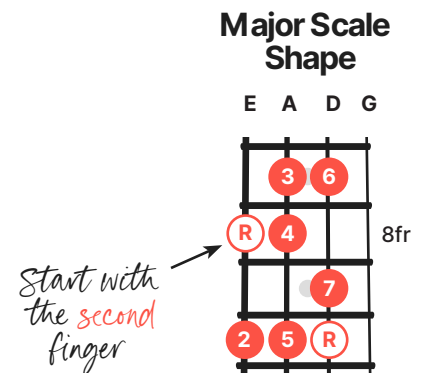
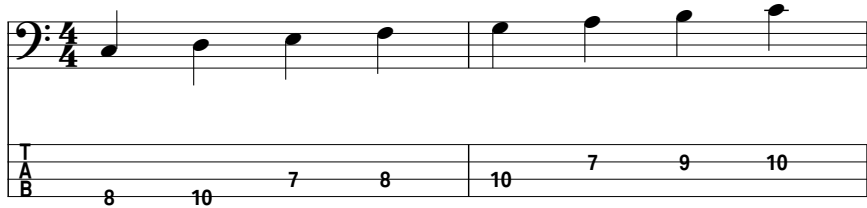
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LESSON 02 (continued)

You already know how to play the **chord scales**, because the major scale contains all the notes of all the modes. Using a major scale shape/pattern that starts with the second finger, the Ionian Mode, is just the major scale:

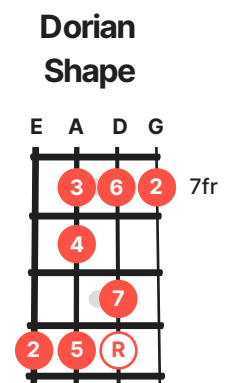
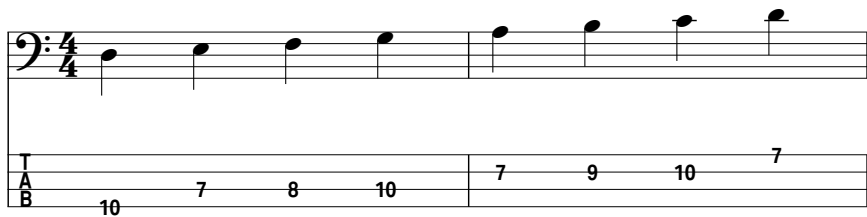
Example 01

C Ionian Mode (Major Scale)



Playing this same major scale pattern but starting and ending on the *second* note of the scale results in the **Dorian Mode/Dorian Chord Scale**. In the key of C Major, this is the D Dorian Scale. It's important to note that we're not playing a D Major Scale here—the notes are all from the *C Major Scale*:

D Dorian Mode



continued →

Continuing through the remaining notes of the scale, and using the same major scale shape, we generate the remaining chord scales*:

Lesson 02 Example 02

E Phrygian Mode

Staff notation for E Phrygian Mode (4/4 time): E2, F2, G2, A2, B2, C3, D3, E3.

Fretboard diagram (T = open string): T, 7, 8, 10, 7, 9, 10, 7, 9.

F Lydian Mode

Staff notation for F Lydian Mode (4/4 time): F2, G2, A2, B2, C3, D3, E3, F3.

Fretboard diagram (T = open string): T, 8, 10, 7, 9, 10, 7, 9, 10.

G Mixolydian Mode

Staff notation for G Mixolydian Mode (4/4 time): G2, A2, B2, C3, D3, E3, F3, G3.

Fretboard diagram (T = open string): T, 10, 7, 9, 10, 7, 9, 10, 12.

A Aeolian Mode

Staff notation for A Aeolian Mode (4/4 time): A2, B2, C3, D3, E3, F3, G3, A3.

Fretboard diagram (T = open string): T, 12, 9, 10, 12, 9, 10, 12, 14.

B Locrian Mode

Staff notation for B Locrian Mode (4/4 time): B2, C3, D3, E3, F3, G3, A3, B3.

Fretboard diagram (T = open string): T, 14, 10, 12, 14, 10, 12, 14, 16.

*The diagrams for the remaining chord scales/modes are left to you to create.

Lesson 03

The "3 Shape Rule"

To be able to play naturally and fluidly up and down the neck, it requires knowing more than a single pattern or shape. That's where the **"3 Shape Rule"** comes into play— to really master the fretboard, it's important that you be able to play **three** different patterns (shapes) for each scale or arpeggio.

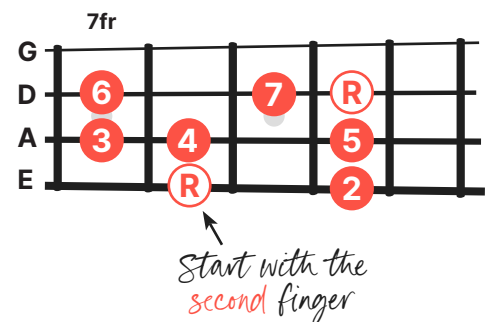
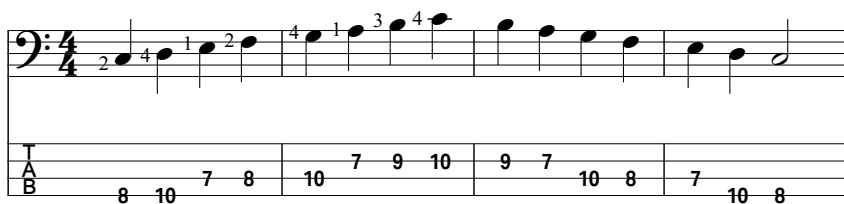
"3 Shape Rule"

You should know *three* shapes or patterns for each scale and chord type: maj7, 7, m7, and m7^b5.

We've already looked at the most common way to play the C Major Scale, starting with the *second* finger playing the root note:

Example 01: C MAJOR SCALE Shape 2

N.C.(C)

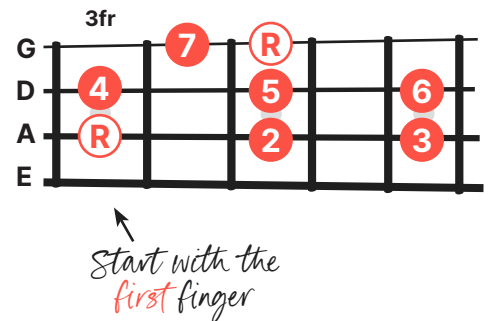


LESSON 03 (continued)

But there are two additional shapes for a major scale that you'll also need to learn, one starting with the root played by the *first* finger; the other with the root played with the *fourth* finger:

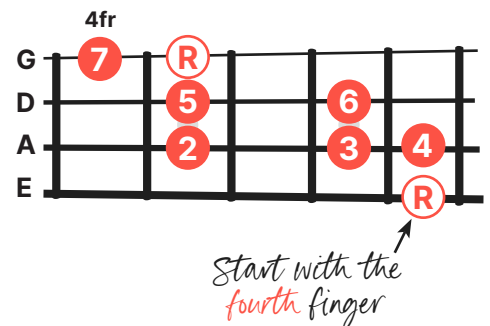
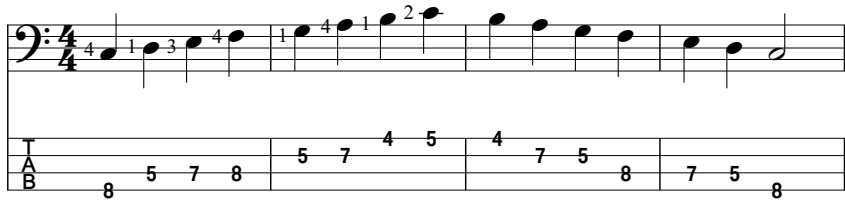
Example 03: C MAJOR SCALE Shape 2

N.C.(C)



Example 04: C MAJOR SCALE Shape 3

N.C.(C)



By using all three patterns, it gives us the freedom to play over the entire fretboard without becoming "boxed in" by only using just one.

continued →

LESSON 03 (continued)

The “3 Shape Rule” and Chord Scales

We’ve already covered how to create a shape for the chord scales of the C Major Scale using Shape 01 (starting with the root on the second finger) in Lesson 02. But how do we incorporate the “3 Shape Rule” when playing the chord scales? We simply repeat the process for our two new major scale shapes. For example, using Shape 04, a we find:

Example 05:

C Ionian	D Dorian
E Phrygian	F Lydian

Not only can we continue this idea for the remaining chord scales using each of these fingerings, we can do the same with *chord arpeggios* as well. Who said there wouldn't be homework!



“Spending 15–20 minutes a day working on this stuff will be a game changer for your bass playing.”

