

## Greek Modes 101

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The major scale is the basis for Western music. First developed based on the research of a Greek mathematician – Pythagoras - born approximately 570 B.C., it evolved to be the basis for church music (Gregorian chants through present day), classical music, and more recently to blues, jazz, and everything in between. In my decade plus of teaching I have played the major scale for hundreds of students. I always ask “Does this sound familiar”. 97 times out of a hundred the answer is “yes”.

Also known as “church modes”, the modes of the major scale are:

Ionian starts on the 1<sup>st</sup> degree, extending to the 8<sup>th</sup> degree  
Dorian starts on the 2<sup>nd</sup> degree, extending to the 9<sup>th</sup> degree  
Phrygian starts on the 3<sup>rd</sup> degree, extending to the 10<sup>th</sup> degree  
Lydian starts on the 4<sup>th</sup> degree, extending to the 11<sup>th</sup> degree  
Mixolydian starts on the 5<sup>th</sup> degree, extending to the 12<sup>th</sup> degree  
Aeolian, starts on the 6<sup>th</sup> degree, extending to the 13<sup>th</sup> degree  
Locrian starts on the 7<sup>th</sup> degree, extending to the 14<sup>th</sup> degree

These were named by the Greeks. The names are inspired by geographic or ethnic regions in ancient Greece. The philosophy writings of both Plato and Aristotle include large sections that describe the effect of different musical modes on mood and on character formation. For example, this quote from Aristotle's "Politics":

"The musical modes differ essentially from one another, and those who hear them are differently affected by each. Some of them make men sad and grave, like the so called Mixolydian; others enfeeble the mind, like the relaxed modes; another, again, produces a moderate or settled temper, which appears to be the peculiar effect of the Dorian; and the Phrygian inspires enthusiasm."

Modes can be derived from any scale. The only difference is that when we apply these to scales other than major scale they do not have Greek names. For example – the “second mode of the minor harmonic scale” means playing the minor harmonic scale from the 2<sup>nd</sup> degree to the 9<sup>th</sup> degree. The only name for it is “the second mode of the minor harmonic scale”.

Why learn modes ?

Knowledge of the modes will help you to navigate effectively when improvising and/or writing. Different modes create different moods, all of which are useful when playing music. Think of them as spices – all our different flavors and enhance musical expression in different ways.

We will work with the C major scale in the following examples. Explore these in all keys. Explore in all positions. The following examples are in the first position.

The Ionian mode is based on the first degree of the scale: C, D, E, F, G, A, B, C.

*Intervals: Root-Whole-Whole-Half-Whole-Whole-Half*

The diagram shows the Ionian mode scale in 4/4 time. The treble clef staff contains the scale: C4 (quarter), D4 (quarter), E4 (quarter), F4 (quarter), G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter). The guitar fretboard diagram below shows the scale on strings T, A, and B. The first measure (C4-G4) has frets 3, 5, 2, 3, 5, 2, 4, 5. The second measure (G4-C5) has frets 5, 4, 2, 5, 3, 2, 5, 3.

The Dorian mode is based on the second note of the scale: D, E, F, G, A, B, C, D

*Intervals: Root-Whole-Half-Whole-Whole-Half-Whole*

*Tip: It is the minor scale with the major sixth.*

The diagram shows the Dorian mode scale in 4/4 time. The treble clef staff contains the scale: D4 (quarter), E4 (quarter), F4 (quarter), G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), D5 (quarter). The guitar fretboard diagram below shows the scale on strings T, A, and B. The first measure (D4-G4) has frets 5, 2, 3, 5, 2, 4, 5, 3. The second measure (G4-D5) has frets 3, 5, 4, 2, 5, 3, 2, 5.

The Phrygian mode is based on the third note of the scale: E, F, G, A, B, C, D, E

*Intervals: Root-Half-Whole-Whole-Half-Whole-Whole*

*Tip: It is a minor scale with second minor degree.*

The diagram shows the Phrygian mode scale in 4/4 time. The treble clef staff contains the scale: E4 (quarter), F4 (quarter), G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), D5 (quarter), E5 (quarter). The guitar fretboard diagram below shows the scale on strings T, A, and B. The first measure (E4-B4) has frets 2, 3, 5, 2, 4, 5, 3, 5. The second measure (B4-E5) has frets 5, 3, 5, 4, 2, 5, 3, 2.



The Locrian is based on the seventh note of the scale: B, C, D, E, F, G, A, B

*Intervals: Root-Half-Whole-Whole-Half-Whole-Whole-Whole*

*Tip: It is the minor scale with the flat 2nd and a flat 5th.*

Here is a visual of all the Greek Modes in the key of C:

**Greek Modes of the C Major Scale**

Ionian (first degree) (Major)

Degree -

Pitch

Interval

1	2	3	4	5	6	7	8
C	D	E	F	G	A	B	C
Root	W-	W-	H-	W-	W-	W-	H

Dorian (second degree) (minor)

Degree -

Pitch

Interval

2	3	4	5	6	7	8	9
D	E	F	G	A	B	C	D
R-	W-	H-	W-	W-	W-	H-	W

Phrygian (third degree) (minor)

Degree -

Pitch

Interval

3	4	5	6	7	8	9	10
E	F	G	A	B	C	D	E
R-	H-	W-	W-	W-	H-	W-	W

Lydian (fourth degree) (Major)

Degree -

Pitch

Interval

4	5	6	7	8	9	10	11
F	G	A	B	C	D	E	F
R-	W-	W-	W-	H-	W-	W-	H-

Mixolydian (fifth degree) (Major)

Degree -

Pitch

Interval

5	6	7	8	9	10	11	12
G	A	B	C	D	E	F	G
R-	W-	W-	H-	W-	W-	H-	W-

Aeolian (sixth degree) (minor)

Degree -

Pitch

Interval

6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	A
R-	W-	H-	W-	W-	H-	W-	W

Locrian (seventh degree) (minor)

Degree -

Pitch

Interval

7	8	9	10	11	12	13	14
B	C	D	E	F	G	A	B
R-	H-	W-	W-	H-	W-	W-	W