Dorian and Mixolydian Song List

When teaching or learning how to play guitar, one of the first hurdles many of us face is finding songs to study that fit specific goals in our practice routine.

One of these common hurdles is finding songs that fit particular modes and scales in order to zoom in and focus on just those sounds in the practice room.

Two of the most common modes that guitarists explore, yet often have trouble finding specific songs to study in these modes are Dorian and Mixolydian.

So, we posted the following on the RGT Facebook Page to see what our readers had to say about this topic.

"We've had a number of email questions recently asking about popular songs for teaching certain modes on guitar. Can you suggest any songs you know of that are predominantly composed/performed in either the Dorian or Mixolydian mode?"

After receiving a strong and varied response to this question, we decided to compile everyone's response and gather them into a list for other guitarists to check out and use in their own teaching and studies.

So, here they are, the Dorian and Mixolydian songs as suggested by the RGT Facebook community.

Dorian Songs for Guitar

Get Lucky – Daft Punk Oye Como Va – Santana So What – Miles Davis Wicked Game – Chris Isaac Boulevard of Broken Dreams – Green Day Solo to Light My Fire – The Doors Moondance – Van Morrison Who Will Save Your Soul – Jewel Evil Ways – Santana Horse With No Name – America

Mixolydian Songs for Guitar

Summer Song – Joe Satriani Solo on Marquee Moon – Television Verse of Sweet Child of Mine – Guns n Roses Verse of She Sells Sanctuary – The Cult Alright Now – Free Sweet Home Alabama – Lynyrd Skynyrd On Broadway – George Benson L.A. Woman – The Doors Seven Bridges Road – The Eagles Southern Cross – CSNY Cinnamon Girl – Neil Young

I play keyboard and tend to notice scales when I hear music.

I have an idea about the original Greek Modes.

I think that when Plato and Aristotle refer to the various modes, they are referring to various possible ways of tuning a seven-stringed lyre. The names for different tunings were later applied to the various musical scales.

Consider the distance between two pitches, one with twice the frequency of the other. If you subdivide this into twelve equal intervals, you get the equal-tempered chromatic scale. This series of tones includes tones that almost match Pythagoras's diatonic scale and the scales used in most folk music around the world. The equal-tempering allows key shifts. (Mathematics is amazing.)

•	•	
C Scale	Frequency ("Well Tempered")	Pythagorean ("Just Intonation")
С	1.0000	1
C#	1.0595	
D	1.1223	1 1/8
D#	1.1892	
E	1.2599	1 1/4
F	1.3348	1 1/3
F#	1.4142	
G	1.4983	1 1/2
G#	1.5874	
А	1.6818	1 2/3
A#	1.7818	
В	1.8877	17/8

C 2.0000

Perhaps Pythagoras would have placed the "blue notes" at 1 1/5, 1 3/5, and 1 4/5. The church modes of medieval and early modern music supposely derive from modes named by the ancient Greeks and described by their writers.

According to the nomenclature of medieval music theorists, who were dealing largely with unchorded plainsong, our natural major is the church "Ionian Mode" (C-D-E-F-G-A-B-C), and our natural minor is the church "Aeolian mode" (C-D-Eb-F-G-Ab-Bb-C).

I became curious about modes when I learned that "Wreck of the Edmund Fitzgerald" and "Scarborough Fair" use the old balladic scale which matches the church "Dorian Mode" (C-D-Eb-F-G-A-Bb-C); I think "Age of Aquarius" does the same, the sea-song "Whay, Hay and Up She Rises", and "Dreadful Wind and Rain" does also.

I used the eerie church "Mixolydian mode" (C-D-E-F-G-A-Bb-C) for my intranet version of "The Pathology Blues", on our quizbank. You can also hear the church "Mixolydian mode" in "The Beat Goes On", "Ritual Fire Dance", "Luck Be a Lady Tonight", the "Star Trek" theme, "Norwegian Wood", "Day Tripper", "Sundown" (Gordon Lightfoot), "Cats in the Cradle", "City of New Orleans" (verse but not chorus), and the theme to "Star Wars". Caedmon recordings used it for the tune for the mystical first song in Yeats's play "The Only Jealousy of Emer". The other church modes are novelties at best. Some of the old Gregorian chant "Sing my tongue..." seems to be Phrygian mode. There is some of the church "Phrygian mode" in "Fiddler on the Roof", and if the song is fully transposed into the church Phygian mode, it still sounds okay. My own attempt to write a song using the church Phrygian mode was dismal. I wrote a little song in an unabashed church "Lydian mode". The mode itself suggested the subject. Unless you only use the subdominant as a leading tone for the dominant, any melody you write in this "mode" will be unnerving -- the subdominant is equidistant from the lower and upper tonics. A correspondent pointed out that the "Lydian" mode makes up some of the "Jetsons" and "Simpsons" theme. Bartok wrote a short piece called "Lydia" in the Lydian mode to demonstrate. Click here for a here to hear this. Another correspondent ("Piano Pete" from Glasgow, Scotland) tells me that the song Lydia by Faure is written in the Lydian mode; "Hebe" is Phrygian. Yet another of my cyberfriends (Rasa, of Starseed Music) is a musician with a special interest in the emotive power of the modes as we know them today. The group's performance of a piece in the Lydian mode is, I found myself agreeing, "hauntingly beautiful" rather than unnerving.

In the Locrian mode, the dead-center position of the dominant makes this even more unmusical. A music professional told me once that no ethnomusicologist has ever documented a folk tune in what medieval theorists called the "Locrian mode".

I browsed a little in Plato, Aristotle, pseudo-Plutarch's "De Musica", and of course the Oxford History of Music, and came away wondering if the medieval music theorists (Boethius, Gregory the Great, their successors) really meant the same thing as did the Greeks who named the modes.

Today most people (following a scholar named Westphal) tell us that the Greek modes were indeed used as "scales" with the tonic notes being the low-pitched one, just as the church mode theorists say. This seems to be based on statements in Plato and Aristotle that the modes had distinct emotive qualities, as our major and minor scales do.

Another school of thought (that of Munro) claims that for the ancients, the modes were actually keys, i.e., you could play any melody in any mode. If this is true, then the ancient Greeks had either perfect pitch or a standard pitchpipe.

I think people have probably liked similar tunes in different eras. I tried to figure out how the ancient Greeks would have played some of our favorites. Ancient Greek lyres typically had seven strings. (Some Hebrew lyres must have had ten strings -- see Psalm 33.) The system of modes is also called "harmoniae", which meant "fitting" or "tuning". Greek writers on music talk about the normal tuning comprising two tetrachords, i.e., a series of four notes with the lowest and highest separated by a major fourth and sharing the center string. Pythagoras and Terpander are both credited with the idea of having the highest string be an octave of the lowest string.



Here are examples of how to tune a seven-string lyre to play some popular melodies, with the lowest string arbitrarily set a "C" with the tonic underlined.

- <u>Yankee Doodle</u> (verse): C-D-E-<u>F</u>-G-A-Bb (original Dorian mode?)
- Man on the Flying Trapeze: C-D-E-<u>F</u>-G-A-A# (original Dorian mode?)
- My Grandfather's Clock: C-D-E-<u>F</u>-G-A-A# (original Dorian mode?)
- <u>City of New Orleans</u> (Verse; Arlo Guthrie): <u>C</u>-D-E-F-G-A-Bb (original Dorian mode?)
- Hi Ho ("Snow White"): C-D-E-<u>F</u>-G-A-A# (original Dorian mode?)
- <u>Wreck of the Edmund Fitzgerald</u>: C-D-E-F-<u>G</u>-A-Bb (original Dorian mode?)
- <u>O Come Emmanuel</u> (Verse): C-<u>D</u>-E-F-G-A-Bb (original Dorian mode?)
- My Darling Clementine: C-E-<u>F</u>-G-A-Bb-C (original Ionian Mode?)
- Streets of Loredo: C-E-<u>F</u>-G-A-Bb-C (original Ionian Mode?)
- I Saw Three Ships: C-E-<u>F</u>-G-A-Bb-C (original Ionian Mode?)
- <u>My Country 'Tis of Thee / God Save the King</u>: C-<u>C#</u>-D#-F-F#-G#-A# (original Locrian mode?)
- It's a Wonderful Life: C-<u>Db</u>-Eb-F-Gb-Ab-Bb (original Locrian mode?)
- Now at the Dawning of the Day (hymn): C-<u>Db</u>-Eb-F-Gb-Ab-Bb (original Locrian mode?)
- Blowin' in the Wind (Bob Dylan): C-<u>Db</u>-Eb-F-Gb-Ab-Bb (original Locrian mode?)
- <u>Danny Boy</u> (Verse): C-D-<u>Eb</u>-F-G-Bb-C (original Lydian mode?)
- <u>When Johnny Comes Marching Home</u>: C-Eb-<u>F</u>-G-Ab-Bb-C (original Mixolydian mode?)
- Rock of Ages: C-Eb-F-G-<u>Ab</u>-Bb-C (original Mixolydian mode?) <u>Ten Little Indians</u>: C-D-E-<u>F</u>-G-A-C (original Phrygian mode?)
- Captain Kangaroo: C-D-E-<u>F</u>-G-A-C (original Phrygian mode?)

- <u>Bear Went Over the Mountain</u>: <u>C</u>-D-E-F-G-A-(C) (original Phrygian mode?)
- <u>Where Have You Been Billy Boy</u>: <u>C</u>-D-E-F-G-A-<u>C</u> (original Phrygian mode?)
- Oh! Susannah!: <u>C</u>-D-E-F-G-A-(C) (original Phrygian mode?)

•

- Aeolian mode?
 - Popeye the Sailor Man: <u>C</u>-E-F-G-A-B-<u>C</u>
 - Take My Breath Away ("Top Gun"): C-D-E-F#-G-A-B
 - Sailing, Sailing: C-Db-Eb-F-G-<u>Ab</u>-Bb
 - Hoppity Hooper: C-D-<u>F</u>-G-A-Bb-C
 - Jingle Bells Rock: C-D-Eb-F-G-A-Bb
 - Harry Potter theme: C-Db-<u>F</u>-G-G#-A-Bb

These are my best guesses about which was which, based on this information:

• The Greek musical system supposedly began with a four-stringed lyre playing a tetrachord C-D-E-F. When three more strings were added, they supposedly made a second tetrachord along with the fourth string. This is the "Yankee Doodle" tuning.

•

- Terpander is sometimes credited with inventing the "Yankee Doodle" tuning, and/or with the modification which places the seventh string as an octave of the first (i.e., the "Ten Little Indians" tuning.)
- •
- Terpander was supposedly the founder of the Dorian system of music. So either the "Yankee Doodle" tuning or the "Ten Little Indians" tuning must have been the original Dorian mode.

•

- I think the "Yankee Doodle" and "Ten Little Indians" tunings are the two easiest ones for composers. So the one which wasn't the Dorian mode must have been the Phrygian mode, since these seem to have been the ancient world's two favorites.
- ٠
- The "Ten Little Indians" tuning allows you to end your song with a four-note major chord with the tonic ending the melody. This must have been popular. Plato preferred the Phrygian mode for peacetime liturgy while Aristotle preferred it for rowdy drinking songs. Generally, melodies on the "Ten Little Indians" tuning are happy.
- •
- "The Bear Went Over the Mountain", which might be the oldest secular song we know (it was a crusader hymn), can be played on either tuning, but you can end it with a fournote major chord if you use the "Ten Little Indians" tuning. The same is true of "Oh! Susannah". So this is why I chose as I did for these songs.

•

• You can write both marching songs and songs of grave emotion using the "Yankee Doodle" tuning, and Plato points out that the Dorian mode is flexable. When Plato said the Dorian mode sounds sincere, and Aristotle said that it avoids extremes, they perhaps meant that there are no 1 1/2-step intervals, and/or that the upper tetrachord matches the lower tetrachord and/or that the tonic would usually fall on one of the middle strings.

- ٠
- So I believe that the "Ten Little Indians" tuning was the original Phrygian mode, and that the "Yankee Doodle" tuning was the original Dorian mode.
- •
- Plato identified the Lydian and Mixolydian as being for maudlin drinking songs. The
 "Danny Boy" tuning and the "Johnny comes Marching Home"/"Rock of Ages" tuning
 both allow a song to end with a four-note minor chord with the tonic in the melody. The
 "Johnny Comes Marching Home" tuning will often have the tonic on the first or third
 strings, generating a minor scale in either case. The "Danny Boy" tuning give a minor
 scale when the tonic is on the first string. If the tonic is on the third string, it gives a
 major scale with the low and high strings respectively providing the plaintive minor third
 and major sixth. All this is perfect for tears-in-beers music. So "Danny Boy" and "Johnny
 Comes Marching Home" are my choices respectively for Lydian and Mixolydian. ("Danny
 Boy" has a minor tetrachord at the bottom so I'll suppose it is the more primitive.)
- ٠
- The other really obvious thing to do with the seven-string lyre is tune it to play "My Darling Clementine". This is my choice for the last mode mentioned by the two great philosophers--the Ionian. Plato calls the Ionian mode relaxing, and Aristotle claimed it made people stupid. Maybe not "stupid"... but I'd agree that it's easy to write gentle mellow songs using the "My Darling Clementine" tuning.
- •
- I matched the original Locrian Mode and the "My Country 'Tis of Thee" scale, because both have the lowest note a half-step below the likely tonic on the second string. The original Aeolian mode is unassigned, and I suspect it was either the "Take My Breath Away" tuning or the "Popeye the Sailor Man" tuning. The former is haunting; the latter is simple and is another tuning that invites a four-note major chord at the end of the major-tune melody.

Obviously I'm speculating about what Plato and Aristotle were actually talking about. But I think (until somebody shows me I'm wrong) that the "modes" were originally neither keys nor scales. **They were originally just different ways of tuning a lyre to play different melodies.** Can any real musicologist help me? **Links to ancient writers:**

In <u>Laches</u>, Plato calls the Dorian the real Greek mode, and says that it creates a feeling of sincerity. He contrasts it with the Ionian, Phrygian, and Lydian. In The Republic, Plato claimed that the Ionian and Lydian are "relaxed / soft / drinking" systems, without military use, and should be banned. (It is hard to believe commentators who say that "relaxed" just means the strings are less taut and thus lower-pitched.) Plato also described the two Lydian systems, as expressing sorrow. The Dorian would remain legal for use in war and crisis, and the Phrygian for peace, dignity, temperance, and worship. The discussion indicates that lyres were manufactured in various modes. Plato wanted

the government to control popular music by allowing only the manufacture of lyres built for the approved modes. In particular, Plato wanted to ban lyres with lots of strings ("a multiplicity of notes") able to play several different modes. <u>Aristotle</u> in the "Politics" said that the Mixolydian mode can make you sad and grave. The Dorian mode settles the mind and is gravest and manliest and "avoids extremes". The Phrygian mode inspires enthusiasm and is exciting and emotional and the best for expressing "Bacchic fury". The "relaxed modes", i.e., Lydian and Ionian make people stupid. Complaints about styles of music corrupting young people aren't new. If we are to take this as evidence that the modes were scales with the tonic note fixed on the lowest pitch, we must explain a few things.

- Scales between set tonics do have emotive qualities. Even children in early grade school with me agreed that the natural major scale is "happy" and the minor scales are "sad".
- 0

0

- Yet Plato and Aristotle cannot agree about what kind of music is typical of the Phrygian mode. This says to me, loud and clear, that whatever the Phrygian mode really was, it did <u>not</u> actually have any single distinctive emotive quality. Instead, Plato and Aristotle were recording their responses to musicians (or styles of music) who happened to prefer particular tunings.
- Although the church "Aeolian mode" sounds sad, the church "Mixolydian mode" doesn't. It's a little different, bouncy, and fun. And the church "Phrygian mode" is very hard to use for composing music that people will actually like. This tells me that even if the "modes" of Plato and Aristotle <u>were</u> scales, they don't match the church modes named from them.
- Anyway, in "The Republic", Plato talks about restricting the numbers of strings on lyres so they could only play a government-approved mode. I find no evidence that the low-pitched note had to be the tonic. I'm satisfied.
- ٠
- <u>Clement of Alexandria</u> knew the Dorian and Phrygian "harmonies" (tunings) and thought David probably tuned Phrygian-style. Link is now down: Larry Mysz on the origins. He also doubts that Gregory's "modes" had much to do with those of Aristotle's time. Some conventional lessions about modes:
 - <u>Musical EdVentures</u>--music theory
 - Greg Lindahl
 - Ancient Greek Music
 - "History of Tuning" [link is now down] gives an alternate system for the original Greek modes. Dorian is E to E on the white keys, Phrygian is D to D on the white keys, Lydian is the major, Aeolian is still the natural minor, Mixolydian is B to B, etc. Credits Pythagoras with introducing the octave as two tetrachords a fifth apart.
 - Encyclopedia of tuning

- <u>Bill Hammel</u>--"We are not quite sure what a Greek mode really was."
- Lucy Tuning
- Lucy's scales, at U. of Hawaii, cited sixty named scales from around the world. The link is now down.
- <u>Erik van der Meut</u> has a program that shows and plays many scales. a target=_blank href="http://www.harmonics.com/scales/index.html">Scales database -- work in progress. Very helpful.

More Scales

Whatever you decide about my idea on the modes... If you like scales, I would enjoy hearing from you.

The standard bugle calls are tritonic (C-E-G-C), since this scale plays easily and naturally on a bugle and these simple sequences are easy to distinguish. The familiar boot camp cadences are major pentatonic (<u>C</u>-D-E-G-A-<u>C</u>) or minor pentatonic (<u>C</u>-D#-F-G-A#-<u>C</u>), as are some intended-to-be-simple tunes like "Old McDonald had a Farm", "Amazing Grace", "Jesus Loves me", "There's a Hole in the Bucket", "The Camptown Races", "Jesus Walked This Lonesome Valley", "Best Day of My Life", and most rock licks and riffs.

Some very old songs ("Pat-A-Pan", "God Rest Ye Merry"), and occasional new ones written to sound elemental ("Neutron Dance" from "Beverly Hills Cop"; "Popcorn"; "Washington Square", "The Good, The Bad, and the Ugly" theme) or simple ("Gilligan's Island" theme) are in the church "Aeolian" natural minor.

Here are some other unconventional octave scales I have noticed, with the tonic at "C":

- Hungarian Rhapsody 3: <u>C</u>-D-Eb-F#-G-Ab-B-<u>C</u> ("Hungarian minor scale")
- •
- •
- "The Godfather" theme: <u>C</u>-C#-D-Eb-G-Ab-B-<u>C</u>
- •
- Hava Nagila: <u>C</u>-C#-E-F-G-Ab-Bb-<u>C</u> (Hungarian folk / Byzantine; turns to harmonic minor at the end)
- •
- Hot Stuff: <u>C</u>-D#-E-F-F#-G-B-<u>C</u>
- ٠
- Rocky & Bullwinkle: <u>C</u>-C#-F#-G-G#-A-B-
- ٠
- Tenderly: <u>C</u>-D-E-F-G-Ab-Bb-<u>C</u> ("Major Minor")
- ٠
- Pulp Fiction "Wipe Out": <u>C</u>-D-E-F-G-Ab-B-<u>C</u> ("Ethiopian / Nat Bhairava")

•

• Oh How We Need a Camel (Chipmunks): <u>C</u>-D#-E-F-G-Ab-Bb-<u>C</u> ("Mela ragavardhani") I think I've got these right.

Noted composer John Carbon and I played keyboard together in high school. **Follow-Up**: April 2005. I had no idea people felt this strongly, or could get so ugly, about the subject of what exactly Plato and Aristotle were thinking about when they described "the modes." Several conservatory types have written, accusing me of the basest stupidity and ignorance. However, none of my detractors has explained to me <u>why</u> I'm wrong, or had disagreed with my little study of what popular tunes go with what tunings. Combined with the level of anger directed against me, this makes me think I'm probably right. After all, if you only have seven notes on your instrument, what reason do you have to talk about scales? My cyberfriend Walt Lysack writes from Manitoba:

If you have not yet explored "old timey" music from the Appalachians, you should listen to Jean Ritchie play the Appalachian dulcimer tuned to each of the 7 modes. The interesting thing is that chords can be created only with a couple of the modal tunings on the dulcimer. The dulcimer fingerb oard is like a guitar fingerboard with somemissing frets. The other modes were not novelties in Appalachian tunes. I have stuck to the "autral" traditional since 1974. Everything I play is "by ear" and requires "memorizing" 100s of tunes.... I like your explanation of modes the best of all I have read. The "lyre tunings" idea is reinforced by dulcimer tunings. My cyberfriend Rom Harre (Distinguished Research Professor, sychology Department, Georgetown University) write:

I am writing a textbook for introductory psychology of music... Of course you are quite right that the modes must have ben tunings.... I would like to use your choice of illustrative tunes for the chapter on Greek and Medieval music.... The sound tracks you added are charming and may sound like the lyre, except for harmonies!! No Greek.

Appreciated. Thanks.

My cyberfriend Merrill Humberg explained the difference between equal tempering and welltempering in January 2006. (I'd always believed they were the same.) Scott Crothers reminded me in July 2008 that "all the notes in [a] Mode need to be represented by a letter name only once in order."

"Well-temperament" is a mode that was used before "equal temperament" took hold in the last century. Well temperament was a few different compromise tunings (between meantone and equal temperaments) that allowed free modulation throughout all of the keys but still attempted to keep the "character" of the keys which is completely lost with equal temperament. Key character used to be a tool that composers used in varying "well-tempered" tunings to create different moods by writing in "uncommon" (usually unusuable due to the meantone or pythagorean tunings used in the past) keys that most would now consider as "out of tune". July 2006: An internet friend, Andrew Re, who clearly has a good ear, wrote me to say that Pink Floyd's "Set the controls for the heart of the sun" on the album "saucerful secrets" is in what is traditionally called the locrian mode. "They do a fade out ending because it is really tough / impossible to resolve the locrian mode without changing to a different mode." I eventually heard the song and he is correct. Thanks.