## The Scales of Harmonies

This is an overview of 33 scales presented in this NewJazz lesson: https://youtu.be/Vq2xt2D3e3E The scales are organized in 7 families. Each family has a specific interval pattern and the scales can be defined by the degree/starting-point on that interval pattern. The 33 scales are derived by complying with some very simple rules: 1) The scales may only contain half, whole and whole-and-a-half steps. 2) Half steps may not be neighbors. 3) Whole and Whole-and-a-half steps may not be neighbors. 4) Whole-and-a-half steps may not be neighbors. If we comply with these simple rules we limit our total number of scales to 33 AND we make sure that all our scales are well suited for building up straightforward and evident harmonies. That may also be why these 33 "scales of harmonies" have been so popular throughout western music history!!!

Donations are very much appreciated :) Donations help me to produce more Music stuff by cutting down the hours at my regular daytime work: https://www.patreon.com/newjazz or https://www.paypal.me/newjazz

Warm regards from Oliver Prehn www.newjazz.dk www.youtube.com/c/newjazz

| Family | Popular name | Interval steps | *Systematic name | Chords |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Major | 1-1-1/2-1-1-1-1/2 | Ionian | Ma7 |
|  | Dorian | 1-1/2-1-1-1-1/2-1 | Dorian | mi7 |
|  | Phrygian | 1/2-1-1-1-1/2-1-1 | Phrygian | mi7 |
|  | Lydian | 1-1-1-1/2-1-1-1/2 | Lydian | Ma7 |
|  | Mixolydian | 1-1-1/2-1-1-1/2-1 | Mixolydian | 7 |
|  | Natural minor | 1-1/2-1-1-1/2-1-1 | Aeolian | mi7 |
|  | Locrian | 1/2-1-1-1/2-1-1-1 | Locrian | mi7b5 |
| 2 | Altered / Super Locrian | 1/2-1-1/2-1-1-1-1 | Ionian \#1 | 7alt / mi7b5 |
|  | Ascending mel. minor | 1-1/2-1-1-1-1-1/2 | Dorian \#7 | miMa7 |
|  | Dorian b2 | 1/2-1-1-1-1-1/2-1 | Phrygian \#6 | mi7 |
|  | Lydian Augmented | 1-1-1-1-1/2-1-1/2 | Lydian \#5 | Ma7\#5 |
|  | Lydian dominant | 1-1-1-1/2-1-1/2-1 | Mixolydian \#4 | 7 |
|  | Aeolian dominant | 1-1-1/2-1-1/2-1-1 | Aeolian \#3 | 7 |
|  | Half diminished | 1-1/2-1-1/2-1-1-1 | Locrian \#2 | mi7b5 |
| 3 | Major \#5 / Major Aug. | 1-1-1/2-11/2-1/2-1-1/2 | Ionian \#5 | Ma7\#5 |
|  | Dorian \#4 | $1-1 / 2-11 / 2-1 / 2-1-1 / 2-1$ | Dorian \#4 | mi7 |
|  | Phrygian dominant | $1 / 2-11 / 2-1 / 2-1-1 / 2-1-1$ | Phrygian \#3 | 7 |
|  | Lydian \#2 | $11 / 2-1 / 2-1-1 / 2-1-1-1 / 2$ | Lydian \#2 | Ma7 |
|  | Altered dominant bb7 | $1 / 2-1-1 / 2-1-1-1 / 2-11 / 2$ | Mixolydian \#1 | dim7 |
|  | Harmonic minor | $1-1 / 2-1-1-1 / 2-11 / 2-1 / 2$ | Aeolian \#7 | miMa7 |
|  | Locrian Ł6 | 1/2-1-1-1/2-11/2-1/2-1 | Locrian \#6 | mi7b5 |
| 4 | Harmonic Major | 1-1-1/2-1-1/2-11/2-1/2 | Ionian b6 | Ma7 |
|  | Dorian b5 | $1-1 / 2-1-1 / 2-11 / 2-1 / 2-1$ | Dorian b5 | mi7b5 |
|  | Phrygian b4 | $1 / 2-1-1 / 2-1 / 2 / 2-1 / 2-1-1$ | Phrygian b4 | $\mathrm{mi7} / 7$ |
|  | Lydian b3 | 1-1/2-11/2-1/2-1-1-1/2 | Lydian b3 | miMa7 |
|  | Mixolydian b2 | $1 / 2-11 / 2-1 / 2-1-1-1 / 2-1$ | Mixolydian b2 | 7 |
|  | Lydian augmented \#2 | 11/2-1/2-1-1-1/2-1-1/2 | Aeolian b1 | Ma7\#5 / dim7 |
|  | Locrian bb7 | $1 / 2-1-1-1 / 2-1-1 / 2-11 / 2$ | Locrian b7 | dim7 |
| 5 | Diminished | $1-1 / 2-1-1 / 2-1-1 / 2-1-1 / 2$ | Diminished | $\operatorname{dim} 7$ |
|  | Dominant diminished | $1 / 2-1-1 / 2-1-1 / 2-1-1 / 2-1$ | Inverted diminished | 7 |
| 6 | Whole tone | 1-1-1-1-1-1 | Whole tone | 7 \#5/b5 |
| 7 | Augmented | $11 / 2-1 / 2-1 \frac{1}{2}-1 / 2-11 / 2-1 / 2$ | Augmented | Ma7 |
|  | Inverted Augmented | $1 / 2-11 / 2-1 / 2-1 \frac{1}{2}-1 / 2-11 / 2$ | Inverted Augmented | 6\#5 |

[^0]
[^0]:    *The "systematic name" column is not consistent with the rigid methods of the established jazz school in which every scale is named according to the Major scale (and what a relief!!!). For example "Aeolian \#7" is an Aeolian scale with a raised $7^{\text {th }}$ step. Aeolian is the ultimate premise (not the Major scale) and the \#7 is the alteration compared to the premise. In this way we achieve a perfect sequential naming system of the first 4 families from lonian to Locrian with a numerical sequence of sharps or flats attached - simple, mathematical and straightforward!!!

