# Music theory notes (for the guitar)

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## 1 Minor scales

Natural, Harmonic, and Melodic (raised 6th and 7th when ascending only).

## 2 Modes

Mnemonic: I Don't Punch Like Muhammad A-Li

• Ionian: C

• Dorian: D

• Phrygian: E

• Lydian: F

• Mixolydian: G

• Aeolian: A

• Locrian: B

## 3 Scale degrees/Intervals

• Major intervals: 2nd, 3rd, 6th, 7th

• Perfect intervals: 1st, 4th, 5th, 8th

### 3.1 Perfect, Augmented, Diminished Intervals

- 2,3,6,7 Major Intervals: add one semitone to top note gives an augmented interval
- $\bullet\,$  2,3,6,7 Major Intervals: lower one semitone gives a minor interval
- $\bullet\,$  2,3,6,7 Major Intervals: lower one tone (two semitones) gives a diminished interval

### 3.2 Example: C major



- Scale degree 1 is known as the tonic.
- Scale degree 4 is known as the subdominant.
- $\bullet$  Scale degree 5 is the dominant.

#### 4 Chords

## 4.1 Major third

4 semitones apart (C-E)

#### 4.2 Perfect fifths

7 semitones apart (C-G)

#### 4.3 Triads

#### 4.3.1 Inversions

- $\bullet$  Root position if a chord has the root note as the lowest pitch, e.g. C E G (1-3-5).
- $\bullet$  First inversion if a chord has the third as the lowest sounding note, e.g. E G C (3-5-1).
- $\bullet$  Second inversion if a chord has the fifth as the lowest sounding note, e.g. G C E (5-1-3).

#### 4.3.2 Some examples of triads

C Major (CEG GBD) Major triad because it has a perfect fifth C-G, i.e., 7 semitones, and a Major third, four semitones (C-E).



 ${\bf A}$   ${\bf Minor}$  A-E is seven semitones but A-C has 3 semitones (=minor third), hence Minor triad.



**D** Minor triad (D-A 7 semitones, D-F 3 semitones)



E Minor triad (E-B 7 semitones, E-G 3 semitones)



F Major (FAC CEG) Major triad



G Major (GBD DF#A ) Major triad





 ${f B}$  Diminished fifth (6 semitones) + Minor third = Diminished triad



## 4.3.3 C major triads

I : Tonic C maj



ii : Dmin



iii : Emin



IV : Subdominant Fmaj



V : Dominant: Gmaj

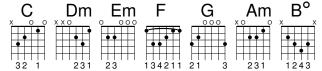


vi:Amin



 $\mbox{vii}\,:\,\mbox{Bdim}$ 





Any diatonic melody can be harmonized with I-IV-V because every single scale degree occurs in this pool of notes.

#### 4.3.4 A minor triads

i : Tonic Amin

ii : Bmin

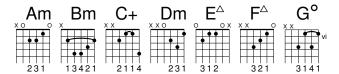
III: Caug

iv: Subdominant Dmin

V: Dominant: Emaj

VI : Fmaj

vii: Gdim



## 4.4 Seventh Chords

These are triads with a seventh degree added.

#### 4.4.1 C major seventh chords

I : Tonic C maj7

ii : Dmin7

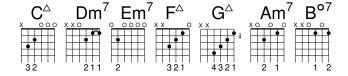
iii Emin7

IV Subdominant Fmaj7

V Dominant seventh: G7

vi Amin7

vii B half-dim



#### 4.4.2 A minor seventh chords

i: Tonic Aminmaj7

ii : Bhalf-diminished

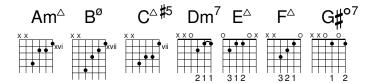
III Caug-maj7

iv Subdominant Dmin7

V Dominant: E7

VI Fmaj7

vii G#dim7



## 5 Cadences

The tonic note of every scale has two closely related triads: the one a fifth above the tonic is the dominant triad, and the one a fifth below is the subdominant. So every tonic tone is the center of a trio of strongly related chords, for example, F...C...G

Dominant chord to Tonic

A cadence is a melodic or harmonic progression that creates a sense of finality or a pause in the music.

Perfect cadence: A G7 followed by a C. Numerically speaking, this is chord V7 followed by chord I.

Imperfect cadence: C followed by G7. Numerically speaking this is chord I followed by chord V7, i.e. the reverse of the example above.

## 6 Common progressions