

# Major and Minor Scales

Uli Widmaier

Much of Western music is based on concepts that are ultimately rooted in the major scale. Other common scales (such as natural, melodic, and harmonic minor) are closely related to the major scale.

There is one major scale, and three minor scales. Each scale has seven different notes. These seven notes are called “scale degrees,” and they are traditionally designated by Roman numerals. Here are some examples:

Scale Degree:	I	II	III	IV	V	VI	VII	I
C Major	C	D	E	F	G	A	B	C
C natural minor	C	D	E <sub>b</sub>	F	G	A <sub>b</sub>	B <sub>b</sub>	C
C harmonic minor	C	D	E <sub>b</sub>	F	G	A <sub>b</sub>	B	C
C melodic minor	C	D	E <sub>b</sub>	F	G	A	B	C

The major and natural minor scales are built on notes with the same pattern of whole steps and half steps: a half step, two whole steps, a half step, three whole steps, repeat. Major and natural minor differ by how each of them fits onto this basic pattern.

Major:           W W H W W W **H W H W W H** W W H W W W H

Minor:           W W H W W **W H W W H W W** W H W W H W W W H

Examples (half steps are bolded and underlined; all others are whole steps):

Scale Degree:	I	II	III	IV	V	VI	VII	I
C Major:	C	D	<u><b>E F</b></u>	G	A	<u><b>B C</b></u>		
C natural minor:	A	<u><b>B C</b></u>	D	<u><b>E F</b></u>	G	A		

The **major scale** has half steps between III and IV and between VII and I.

The **natural minor scale** has half steps between II and II and between V and VI.

NOTE: Major and natural minor are just two of a total of seven ways of fitting a scale onto the basic pattern. These seven ways are known as the “Modes.” The Modes are essential for understanding early (pre-1700) and contemporary music, especially jazz.

The harmonic and melodic minor scales have different half step arrangements.

**Harmonic minor** is arranged as follows:

Scale Degree:	I	II	III	IV	V	VI	VII	I
Harmonic minor:	C	<u><b>D E<sub>b</sub></b></u>	F	<u><b>G A<sub>b</sub></b></u>	<u><b>B C</b></u>			

Harmonic minor has half steps between II and III, between V and VI, and between VII and I. In harmonic minor, the step between VI and VII is an **augmented** step, NOT a whole step.

**Melodic minor** is arranged as follows:

Scale Degree:	I	II	III	IV	V	VI	VII	I
Melodic minor:	C	<u><b>D E<sub>b</sub></b></u>	F	G	A	<u><b>B C</b></u>		

Melodic minor has half steps between II and III and between VII and I.

NOTE: Usually, melodic minor is used only in ascending scales. When descending, natural minor is used.

NOTE: Major and harmonic and melodic minor have a half step between VII and I. In these scales, VII is called the “leading note.” Natural minor, with its whole step between VII and I, does not have a leading note.