

GRADUATE THEORY ENTRANCE EXAM GUIDE

TEXAS WOMAN'S UNIVERSITY

GRADUATE THEORY ENTRANCE EXAM GUIDE

This guide is meant to help graduate students prepare for the Graduate Theory Entrance Exam. This evaluation is meant to ensure that students have competence in basic tonal harmony. There are two parts to the exam: written and aural.

PART ONE: WRITTEN

- ▶ Four voice part-writing to a given figured bass
- ▶ Harmonic analysis using Roman numerals
- ▶ Transpose a notated passage to a new key
- ▶ Harmonization of a simple diatonic melody

PART TWO: AURAL

- ▶ Sightsinging of a melody that contains some functional chromaticism

Students must achieve a 75% on both the aural and written components of the exam. If a passing score is not received on one or both sections of the exam, the student may be required to take remedial coursework.

Recommended review materials include most of the commonly used undergraduate music theory texts such as: *Tonal Harmony* by Koska, Payne, and Almén, *The Musician's Guide to Theory and Analysis* by Clendinning and Marvin, and *Harmony in Context* by Francoli.

THE EXAM IS GIVEN PRIOR TO THE BEGINNING OF THE FALL SEMESTER. PLEASE CHECK THE TWU MUSIC WEBSITE (WWW.TWU.EDU/MUSIC) FOR THE EXACT DATE AND TIME.

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PART-WRITING

Realize the following figured bass in four voices. Provide Roman numerals for each chord.

A.

6 6 6 7 6

4 4 3 4

B.

#6 6 6

5 4 3 3

C.

b6 6 b6 6 7

b5 b5 4 b5

D.

b6 b4 6 b3 7

2 b5 b 4

PART-WRITING | SOLUTIONS*

Realize the following figured bass in four voices. Provide Roman numerals for each chord.

*The solutions below are one way of part-writing the following passages.

A.

i i⁶ ii⁶ i₄⁶ V⁷ i iv₄⁶ i

B.

I vii⁶₅/vi vi V I vii⁶₃/V V⁶ I

C.

I vii⁶₅/ii ii⁶ Ger⁶ I₄⁶ V⁷ I

D.

i bII⁶(N6) V₂⁴ V₅⁶/IV IV V⁷ i

PART-WRITING | IN-DEPTH

An in-depth look at the part-writing solutions, this includes tips and best practices for avoiding part-writing errors.

A few basics:

- ▶ Voices can move in parallel, contrary, and oblique (one voice moves while the other stays the same) motion. In a four-voice texture, contrary and oblique motion are most common.
- ▶ Parallel fifths and octaves are always bad.
- ▶ When in doubt, double the root of the chord.
- ▶ Never double the leading-tone.

A.

When possible, keep common tones.

Double the bass or soprano in minor first inversion chords.

7th of a V7 resolves down.

Can also be labeled a V 6/4.

Leading tone (scale degree 7) resolves up.

In minor, the leading tone must always be raised (an accidental must be added).

B.

Always resolve the root of a fully-diminished seventh chord, regardless of what voice it is in, up a half-step. All other voices will most often move down.

Do not double the bass in major first inversion chords. If the bass was doubled in the boxed chord below, we would get a doubled leading-tone - which is very bad.

Between the bass and tenor is the only admissible place to have larger than an octave space between voices. The space between soprano/alto and alto/tenor voices must always be an octave or less. *And while on the topic of voicing, avoid voice-crossings as much as possible.* Basic examples like these should not require the crossing of voices.

- C.** Here is an example of a fully-diminished chord resolving differently. Notice that while the alto and tenor voices appear to move in parallel fifths, upon closer inspection it is seen that they are actually unequal fifths - the B and F is a diminished fifth and the C and E is a perfect fifth.

This is a-okay!

Root

Common tone

Leading-tone resolving up.

Seventh resolving down.

I vii°₅/ii ii°⁶ Ger°⁶ I⁴ V⁷ I

The primary voice-leading rule for augmented-sixth chords is the same regardless of the type (Italian, French, German): *the augmented sixth interval always resolves in contrary motion out to an octave*. In the example above, the G-flat and E-natural create the augmented-sixth interval. The G-flat moves a half-step down to F and the E-natural moves a half-step up to F. All other voices of the augmented-sixth chord resolve by step or common tone.

- D.** Double the root when voicing a Neapolitan 6 (also called $\flat\text{II}^6$). The lowered second scale degree (D-flat) should resolve to the leading-tone (B-natural).

Seventh

Leading-tone

Keeping the common tone avoids potential parallel octaves with the bass voice.

i $\flat\text{II}^6(\text{N}6)$ V₂ V₅/IV IV V⁷ i

The third of a secondary dominant always resolves up by half-step since it functions as the leading-tone of the following tonicized chord (E-natural is the leading-tone of F major).

MELODY HARMONIZATION

Harmonize the following melodies in four voices. Every pitch of the melody should have an assigned harmony.

A. Include a deceptive cadence in the following harmonization.



B. Include at least one secondary dominant in the following harmonization.



C. Include a Neapolitan 6 chord in the following harmonization.



D. Include a perfect authentic cadence in the following harmonization.



MELODY HARMONIZATION | SOLUTIONS*

Harmonize the following melodies in four voices. Every pitch of the melody should have an assigned harmony.

*The solutions below are but one of many ways to harmonize the following melodies.

A. Include a deceptive cadence in the following harmonization.

Harmonization for Exercise A (B-flat major, 4/4 time):

Chords: I, V, I, ii⁷, V⁷, vi

B. Include at least one secondary dominant in the following harmonization.

Harmonization for Exercise B (D major, 4/4 time):

Chords: I, V₅/IV, IV, V₅/V, V, I

C. Include a Neapolitan 6 chord in the following harmonization.

Harmonization for Exercise C (D major, 4/4 time):

Chords: i, i⁶, iv, bII⁶, V, V⁷, i

D. Include a perfect authentic cadence in the following harmonization.

Harmonization for Exercise D (B-flat major, 4/4 time):

Chords: i, iv, V, V⁷, i, ii[°], V⁷, I

MELODY HARMONIZATION | IN-DEPTH

When harmonizing a melody, it is important to remember the three types of chord functions: Tonic (T), Dominant (D), and Pre-dominant (P).

- ▶ The I chord is the primary tonic functioning chord though a vi can substitute for a I (a deceptive cadence is a good example of this). A tonic functioning chord may move to either a dominant or pre-dominant chord.
- ▶ Dominant chords lead to the tonic and the most common are V or vii° chords.
- ▶ Pre-dominant chords precede the dominant but are not the tonic. Most common pre-dominant chords include IV, ii, and vi.

Since the tonic and dominant functions are the most important, first identify the key and determine the chord tones for the I and V in that key. Next, identify those pitches in the melody and determine which function those pitches imply. As a general rule, the last two pitches of a phrase will be supported by a dominant to tonic chord progression. For pitches that do not fit within a tonic or dominant functioning chord, such as scale degree six (la), consider a pre-dominant chord like IV. A progression can include a series of consecutive pre-dominant chords before arriving to the dominant. Note that a pre-dominant chord bridges the gap between the tonic and dominant but not the other way around - a *dominant chord will rarely be followed by a pre-dominant functioning chord*.

A. Include a deceptive cadence in the following harmonization.

Function: **T** **D** **T** **P** **D** **T (substitute)**

Could have also been harmonized as a vi to create a deceptive cadence.

Deceptive cadence
(any cadential progression of the dominant to a chord other than the expected. The most common deceptive cadence is a V to vi.)

B. Include at least one secondary dominant in the following harmonization.

A secondary dominant tonicizes (makes tonic) a chord that does not have a tonic function. In the example below, the IV and V are preceded by their respective dominants.

Function: **I: T**

IV: D **P T** **V: D** **D T** **T**

Secondary dominants can be in root position or inversion.

Melody note ($\hat{4}$) is not found in a I or V triad thus making it a good candidate for a pre-dominant chord (IV).

C. Include a Neapolitan 6 chord in the following harmonization.

Function: **T** **T** **P** **P** **D** **D** **T**

Keep as many common tones as possible to create smooth voice-leading.

The Neapolitan has a *pre-dominant function* and most commonly moves directly to the dominant.

A melody moving scale degrees $\hat{5} - \hat{4} - \hat{3}$ most often implies a V - V7 - I progression.

D. Include a perfect authentic cadence in the following harmonization.

Function: **T** **P** **D** **D** **T** **P** **D** **T**

($\hat{5}$ $\hat{4}$ $\hat{3}$)

i iv V V⁷ i ii[°] V⁷ I

Spacing between soprano/alto voices and alto/tenor voices should never exceed an octave. Spacing between tenor and bass is the only place where the spacing may be larger than an octave.

Melody ($\hat{5}$ - $\hat{4}$ - $\hat{3}$) once again implies a V - V⁷ - I progression.

Perfect Authentic Cadence Requirements for a PAC:

1. Both the dominant and tonic are in root position.
2. Scale degree one ($\hat{1}$) is in the top voice in the last chord.

TRANSPOSITION

Transpose the following melodies on the blank staves below.

A. Transpose the melody to the key a *major third below*. Add the new key signature.

A musical score for the song 'The Rose Tree'. It consists of two staves. The top staff is in treble clef with a key signature of one flat (B-flat) and a 6/8 time signature. The bottom staff is in bass clef with a key signature of one flat (B-flat) and a 6/8 time signature. The melody is written in the top staff, starting with a quarter rest, followed by a quarter note G4, an eighth note A4, and a quarter note B-flat4. The melody continues with a quarter note G4, a quarter note F4, a quarter note E4, and a quarter note D4. The melody concludes with a quarter note C4, a quarter note B-flat4, and a quarter note A4. The bottom staff contains a single bass line with a quarter note G2, a quarter note F2, a quarter note E2, and a quarter note D2. The score is divided into five measures by vertical bar lines.

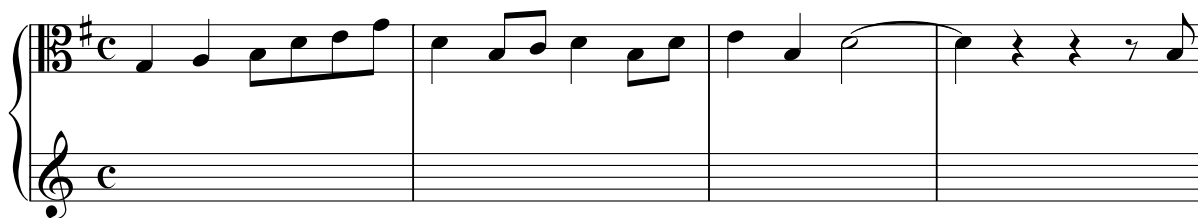
A musical score for the song 'The Rose Tree'. The score is written for a piano, with a treble and bass staff. The key signature is one flat (B-flat), and the time signature is 4/4. The melody is in the treble staff, and the bass staff provides a simple accompaniment. The melody consists of a series of eighth and quarter notes, with a final half note. The bass staff has a simple accompaniment of quarter and eighth notes. The score is divided into five measures.

B. Transpose the melody to the key a *major second below*. Add the new key signature.

A musical score for the song 'The Rose Tree'. The score is written for a piano, with a treble and bass staff. The key signature is one flat (B-flat), and the time signature is 6/8. The melody is in the treble staff, and the bass staff provides a simple accompaniment. The score consists of four measures. The first measure contains a whole note chord (F4, A4, C5) and a half note chord (F4, A4, C5). The second measure contains a whole note chord (F4, A4, C5) and a half note chord (F4, A4, C5). The third measure contains a whole note chord (F4, A4, C5) and a half note chord (F4, A4, C5). The fourth measure contains a whole note chord (F4, A4, C5) and a half note chord (F4, A4, C5).

[illegible]

C. Transpose the melody to the key a *perfect fifth* above. Add the new key signature.



TRANSPOSITION | SOLUTIONS

Transpose the following melodies on the blank staves below.

A. Transpose the melody to the key a *major third below*. Add the new key signature.

Exercise A shows two systems of piano accompaniment in 6/8 time. The first system consists of two staves: the top staff is in G major (one sharp) and the bottom staff is in E-flat major (three flats). The second system continues the accompaniment in the same keys. The melody to be transposed is not explicitly written but is implied by the exercise instructions.

B. Transpose the melody to the key a *major second below*. Add the new key signature.

Exercise B shows two systems of piano accompaniment in 6/8 time. The first system consists of two staves: the top staff is in G major (one sharp) and the bottom staff is in E-flat major (three flats). The second system continues the accompaniment in the same keys. The melody to be transposed is not explicitly written but is implied by the exercise instructions.

C. Transpose the melody to the key a *perfect fifth* above. Add the new key signature.

The musical score is written for piano in 3/8 time, key of D major (two sharps: F# and C#). It consists of two systems of music. The first system contains four measures. The second system contains five measures. The melody is written in the right hand, and the accompaniment is in the left hand. The key signature is D major.

System 1:

- Measure 1: Right hand: quarter note D4, quarter note E4, quarter note F#4. Left hand: quarter note D3, quarter note E3, quarter note F#3.
- Measure 2: Right hand: quarter note G4, quarter note A4, quarter note B4. Left hand: quarter note G3, quarter note A3, quarter note B3.
- Measure 3: Right hand: quarter note C5, quarter note B4, quarter note A4. Left hand: quarter note C4, quarter note B3, quarter note A3.
- Measure 4: Right hand: quarter note G4, quarter note F#4, quarter note E4. Left hand: quarter note G3, quarter note F#3, quarter note E3.

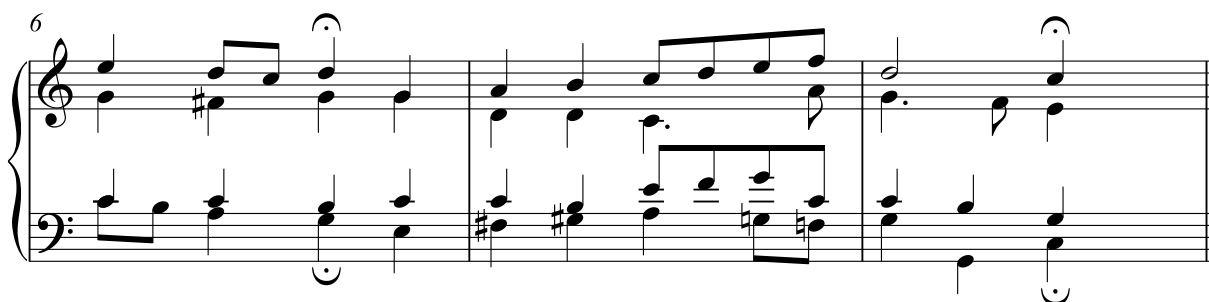
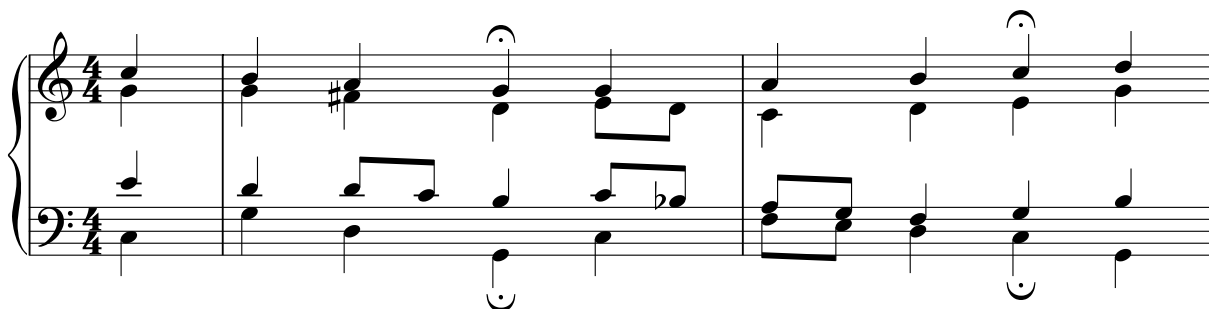
System 2:

- Measure 5: Right hand: quarter note D4, quarter note E4, quarter note F#4. Left hand: quarter note D3, quarter note E3, quarter note F#3.
- Measure 6: Right hand: quarter note G4, quarter note A4, quarter note B4. Left hand: quarter note G3, quarter note A3, quarter note B3.
- Measure 7: Right hand: quarter note C5, quarter note B4, quarter note A4. Left hand: quarter note C4, quarter note B3, quarter note A3.
- Measure 8: Right hand: quarter note G4, quarter note F#4, quarter note E4. Left hand: quarter note G3, quarter note F#3, quarter note E3.
- Measure 9: Right hand: quarter note D4, quarter note E4, quarter note F#4. Left hand: quarter note D3, quarter note E3, quarter note F#3.

ANALYSIS 1

Use Roman numerals to analyze the following chorale. Label all chords, non-chord tones, cadences, and modulations.

J.S. Bach | Ach Gott und Herr | BWV 255



ANALYSIS 1 | SOLUTION

Use Roman numerals to analyze the following chorale. Label all chords, non-chord tones, cadences, and modulations.

J.S. Bach | Ach Gott und Herr | BWV 255

The image displays a musical score for the song "The Rose Tree" in 4/4 time. The score is divided into three systems, each with a piano accompaniment part and a corresponding harmonic analysis below it.

System 1: The piano part begins with a treble and bass clef. The harmonic analysis below it is: CM: I V V/V ⁷ V I IV vi⁴₃ vii^{°6} I V. Above the first measure, there is a circled "HC" (Half Cadence) and a circled "IAC" (Imperfect Authentic Cadence) above the final measure.

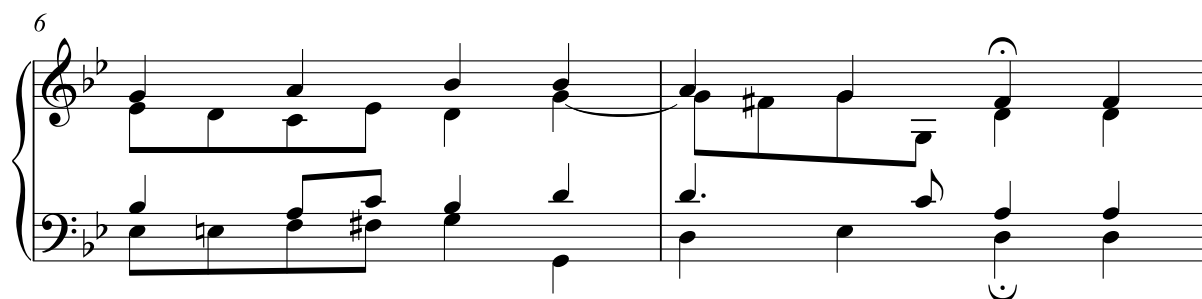
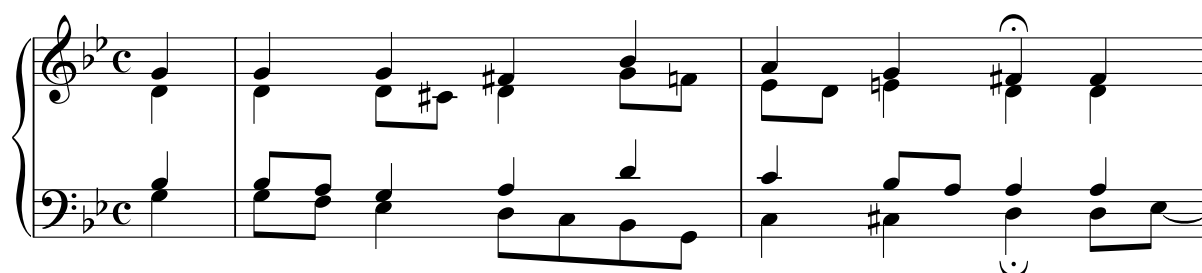
System 2: The piano part continues with a treble and bass clef. The harmonic analysis below it is: vii^{°5} I⁶ V HC I ii⁶₅ V ⁷ I CM: I⁶ vii^{°6} I V V. Above the first measure, there is a circled "ET" (Enharmonic Tritone) and a circled "PAC" (Perfect Authentic Cadence) above the final measure.

System 3: The piano part continues with a treble and bass clef. The harmonic analysis below it is: I V⁴₃/V vii^{°6}/V V I⁶ V⁶₅/V vii^{°6}/vi vi ii⁴₃ I⁶₄ IV V V⁷ I. Above the first measure, there is a circled "PT" (Perfect Tritone) and a circled "PAC" (Perfect Authentic Cadence) above the final measure.

ANALYSIS 2

Use Roman numerals to analyze the following chorale. Label all chords, non-chord tones, cadences, and modulations.

J.S. Bach | Ich hab' mein' Sach' Gott heimgestellt | BWV 351



ANALYSIS 2 | SOLUTIONS

Use Roman numerals to analyze the following chorale. Label all chords, non-chord tones, cadences, and modulations.

J.S. Bach | Ich hab' mein' Sach' Gott heimgestellt | BWV 351

The musical score is in G minor (three flats) and 3/4 time. It consists of 8 measures. The analysis is as follows:

Measure 1: Treble clef has a whole note chord (G-B-E). Bass clef has a whole note chord (G-B-E). Roman numerals: i i . Labels: 7-6 sus, PT, PT.

Measure 2: Treble clef has a whole note chord (A-C-G). Bass clef has a whole note chord (A-C-G). Roman numerals: It^6 V V_2^4 i^6 i^7 ii^{o6} . Labels: PT, PT.

Measure 3: Treble clef has a whole note chord (B-D-F). Bass clef has a whole note chord (B-D-F). Roman numerals: vii^{o7}/V V_3^6/V V V . Labels: HC, ANT.

Measure 4: Treble clef has a whole note chord (C-E-G). Bass clef has a whole note chord (C-E-G). Roman numerals: vii^4_2 V V_2^4 I IV vii^{o6}_5 V^7 i $BbM: V$ V V^6/V V V_2^4 I^6 . Labels: ANT, sus, PT, sus.

Measure 5: Treble clef has a whole note chord (D-F-A). Bass clef has a whole note chord (D-F-A). Roman numerals: IV vii^{o7}/V V vii^{o7}/vi vi . Labels: DC, 4-3 sus.

Measure 6: Treble clef has a whole note chord (E-G-B). Bass clef has a whole note chord (E-G-B). Roman numerals: $Gm: i$ i V vi^7 V V . Labels: HC.

Measure 7: Treble clef has a whole note chord (F-A-C). Bass clef has a whole note chord (F-A-C). Roman numerals: V_3^4 vii^4_3 V_2^4 i^6 I^6 IV vii^{o7}/V V V^7 I . Labels: PAC, PT, PT, NT, PT, 4-3 sus.

Measure 8: Treble clef has a whole note chord (G-B-E). Bass clef has a whole note chord (G-B-E). Roman numerals: i i It^6 V V_2^4 i^6 i^7 ii^{o6} vii^{o7}/V V_3^6/V V V V . Labels: HC, ANT.

SIGHTSINGING EXAMPLES

Below are representative melodies from the entrance exam. Melodies may be transposed to accommodate one's vocal range and should be sung using a syllable system (i.e. solfege - minor la, minor do, or fixed do - or numbers).

A.

p

mf

dim. e rit.

p

B.

p

fp

p

C.

p

D.

f *mp*

E.

mf *p*

F.

mf *p* *cresc.* *decresc.*

SIGHTSINGING | TIPS

Tonicization- always tonicize before doing any sightsinging or dictation exercise. To tonicize simply means to sing a short melodic pattern that centers your ear on the tonic of the key. There are numerous tonicization patterns but the following is recommended:

Tonicization pattern shown with the syllables for minor do, minor la, and numbers.

Do	Mi	Sol	La	Sol	Fa	Re	Ti	Do	Do	Me	Sol	Le	Sol	Fa	Re	Ti	Do
									(La	Do	Mi	Fa	Mi	Re	Ti	Si	La)
(1	3	5	6	5	4	2	7	1)	(1	3	5	6	5	4	2	7	1)

There are a two benefits of this pattern. First, all seven diatonic pitches are sung. Second, this pattern outlines not only the tonic triad but also the dominant seventh triad (sol-fa-re-ti), thus providing a very strong grounding in the tonicized key.

Always keep “do” - regardless of what happens in the melody, always be able to return back to the tonic (“do”) if you get off.

Sing at a slow and **steady** tempo. Sing at a tempo where you have time to look ahead to the next note. If you make a mistake, do not stop - keep going!

A student will be given a short period of time to look over a sight-melody before having to sing. Some things to observe during that period include:

- ▶ The key and starting pitch/syllable
- ▶ Time-signature
- ▶ Recurring sections
- ▶ Repeated rhythmic or pitch patterns
- ▶ Large or awkward leaps
- ▶ Accidentals

TERMS

Triads and inversions

Major scales

Minor scales

Natural

Harmonic

Melodic

6/4 chords

Cadential

Passing

Pedal

Function

Tonic

Predominant

Dominant

Cadences

Perfect Authentic (PAC)

Imperfect Authentic (IAC)

Plagal (PC)

Deceptive (DC)

Half (HC)

Non-chord tones

Passing tone (PT)

Neighbor tone (NT)

Appoggiatura (APP)

Escape Tone (ET)

Suspension (SUS)

Retardation (RET)

Anticipation (ANT)

Seventh chords

Major

Major-minor

minor

half-diminished

fully-diminished

Secondary dominant chords

Secondary leading-tones chords

Modulation

Diatonic and chromatic pivot chord

Common tone

Sequential

Phrase

Direct

Modal mixture

Augmented 6th chords

Italian

French

German

Neapolitan chord

Sequences

Modes

Ionian

Dorian

Phrygian

Lydian

Mixolydian

Aeolian

Locrian

ONLINE RESOURCES

Music Theory for Musicians and Normal People (<http://tobyrush.com/theorypages/index.html>)

- ▶ Excellent informational sheets on a wide variety of theory topics, ranging from beginning to advanced.

musictheory.net

- ▶ Basic ear-training and keyboard exercises
- ▶ Fundamental topics such as rhythm, meter, scale, key signatures, and intervals
- ▶ More advanced topics on diatonic chords, sevenths, progressions, and Neapolitan chords.

teoria.com

- ▶ Ear-training and theory exercises
- ▶ Jazz exercises

Dolmetsch Music Theory (<http://www.dolmetsch.com/theoryintro.htm>)

- ▶ In-depth lessons on numerous music theory and history topics, including figured bass and twentieth harmony.

8notes.com/theory

- ▶ Ear-training exercises and basic music theory topics.