

SØRAV MUSIC ACADEMY

LEVEL 4 · MUSIC THEORY & COMPOSITION

A practical guide to rhythm, pitch, scales, modes, harmony, voice leading, melody, arrangement and ear training.

How to use this guide

Work with a keyboard or Logic Pro Piano Roll. Sing or play every example where possible. Learn the sound and relationship, not only the name. Theory is a tool for making and hearing music, not a set of rules that replaces listening.

Lesson 1: Rhythm, Meter and Subdivision

Learning objective: Count and organise musical time so you can program, edit and arrange parts that lock together.

Pulse, tempo and beat

The pulse is the steady reference you feel or count. Tempo expresses pulse speed in beats per minute (BPM). A groove may imply a pulse even when no instrument plays every beat.

Meter and bar lines

Meter groups beats into recurring patterns. In 4/4, four quarter-note beats usually form a bar; in 3/4, three; in 6/8, six eighth-note subdivisions are commonly felt in two larger pulses. The top number and bottom number describe grouping and note-value reference.

Subdivision and syncopation

Subdivision divides beats into smaller equal parts such as eighth notes, sixteenth notes or triplets. Syncopation emphasises weak parts of the beat or spaces between strong beats, creating forward motion or surprise.

Groove and feel

Swing changes the spacing of paired subdivisions from equal divisions toward a long-short relationship. Groove also depends on timing, accents, note length, sound choice and interaction—not just quantisation settings.

Use the grid musically

A DAW grid is a guide. Tight editing can be useful, but moving every note exactly to the grid can remove expressive feel. Choose grid resolution based on the musical phrase and edit only what serves the performance.

Rhythm grid

Beat: 1 2 3 4 Eighths: 1 & 2 & 3 & 4 & Sixteenths: 1 e & a 2 e & a 3 e & a 4 e & a
Subdivisions create rhythmic detail; accents and placement create groove.

Logic Pro practical

In Logic Pro, create a MIDI region at 90 BPM in 4/4. Program a kick on beats 1 and 3, snare on 2 and 4, and eighth-note hi-hats. Duplicate the region, then make a second version with a few deliberate sixteenth-note syncopations. Compare the feel.

Listening exercise

Tap the pulse of three songs. Count bars, identify whether the feel is straight or swung, and clap eighth-note then sixteenth-note subdivisions.

Common mistakes

- Confusing tempo with meter.
- Treating 6/8 as automatically identical to 3/4.
- Quantising every performance without listening.
- Adding syncopation without considering the main pulse.

Completion task

Submit an 8-bar MIDI groove and annotate the meter, tempo, subdivision and two places where accents create the feel.

Lesson 2: Notes, Semitones and Intervals

Learning objective: Understand pitch relationships and identify intervals as the building blocks of scales, melodies and chords.

Pitch names

In common Western equal-tempered music, the note names A through G repeat across octaves. Accidentals such as sharp and flat raise or lower a note by a semitone; enharmonic spellings can name the same sounding pitch in many contexts.

Semitones and whole tones

A semitone is the smallest step in the standard 12-note equal-tempered octave; two semitones make a whole tone. On a piano keyboard, adjacent keys are a semitone apart, including the pairs E–F and B–C where no black key lies between them.

What an interval measures

An interval describes the distance between two pitches. Interval names count letter steps, while quality—major, minor, perfect, augmented or diminished—describes the exact size in semitones. The same sounding distance can be spelled differently depending on musical function.

Octaves and register

An octave spans 12 semitones in equal temperament. Notes an octave apart often sound closely related because their frequencies have a 2:1 relationship, though timbre and register change how they are perceived.

Intervals by ear

Practise ascending, descending and harmonic intervals. Song associations can help at first, but the aim is to hear the size and character directly rather than depend on memorised songs.

Pitch distance

C → C $\blacksquare$ = 1 semitone | C → D = 2 | C → E $\blacksquare$ = 3 | C → E = 4 | C → G = 7 | C → C' = 12

Interval spelling matters: a sounding distance and its musical name are related but not identical.

Logic Pro practical

In Logic Pro's Piano Roll, enter a C note and then add notes one, two, three, four, five and seven semitones above it. Listen to each as a melodic interval, then play pairs simultaneously and name the interval spelling.

Listening exercise

Use a keyboard or piano sound to compare minor and major thirds, perfect fourths, perfect fifths and octaves. Sing each interval back before checking the notes.

Common mistakes

- Assuming a semitone always means moving from a white key to a black key.
- Confusing interval number with semitone count.
- Ignoring note spelling in chord analysis.
- Relying only on song mnemonics for ear training.

Completion task

Create an interval worksheet with 10 examples: write the lower note, upper note, interval name and whether it is melodic or harmonic.

Lesson 3: Major and Minor Scales

Learning objective: Build major and natural minor scales and understand how scale degrees create a tonal framework.

Scale patterns

The major scale follows whole, whole, half, whole, whole, whole, half steps. Natural minor follows whole, half, whole, whole, half, whole, whole. These patterns can be transposed from any starting note, with correct spelling.

Scale degrees

Scale notes can be numbered 1 through 7. In a major key, degree 1 is the tonic, 4 the subdominant and 5 the dominant. Degree 7 is a leading tone when it lies a semitone below the tonic and tends to pull toward it.

Relative major and minor

A major key and its relative natural minor share the same key signature but begin on different tonic notes; A minor is the relative minor of C major. Shared notes do not mean the two keys feel identical because tonic, harmony and melodic emphasis differ.

Key signature and accidentals

A key signature indicates a default pattern of sharps or flats. Accidentals can alter notes temporarily. A song may also borrow notes, modulate or use modes, so key signatures alone do not tell the whole harmonic story.

Use scales creatively

A scale is a pool of notes, not a melody by itself. Strong melodies use rhythm, contour, repetition, tension and resolution. Chord tones often provide stability while non-chord tones create movement.

Scale step patterns

Major: W W H W W W H Natural minor: W H W W H W W
W = whole step (2 semitones); H = half step (1 semitone).

Logic Pro practical

Create a one-octave C major scale and A natural minor scale in Logic Pro's Piano Roll. Label scale degrees 1–7. Make a four-bar melody using mostly stepwise motion, then revise its rhythm while keeping the pitch set unchanged.

Listening exercise

Sing the tonic, then degrees 2, 3, 5 and 7 in major. Repeat in natural minor and notice which scale degrees change.

Common mistakes

- Treating a key signature as proof that every note must stay inside the scale.
- Confusing relative minor with parallel minor.
- Writing melodies by scale order alone.
- Forgetting that tonic emphasis shapes perceived key.

Completion task

Write C major and A natural minor, mark their shared notes, then create two different four-bar melodies that sound distinct despite sharing pitches.

Lesson 4: Modes and Tonal Centres

Learning objective: Recognise modes as scale patterns with distinctive intervals and a clearly established tonal centre.

What modes are

Modes are scale forms defined by interval patterns and tonal emphasis. The familiar seven modes can be related to rotations of a major scale, but their sound is best understood by hearing each against its own tonic.

The tonic matters

Playing C major notes from D to D does not automatically make a convincing D Dorian passage. D must feel like home through bass, harmony, phrasing and resolution. Tonal centre is created by musical emphasis, not merely the first note.

Useful modal colours

Dorian has a minor third with a raised sixth compared with natural minor. Phrygian features a lowered second; Lydian a raised fourth; Mixolydian a lowered seventh relative to major. These characteristic notes help distinguish modes.

Harmony and drones

A sustained tonic or repeated modal vamp can make the colour easier to hear than functional chord progressions that pull strongly toward another key. Avoid introducing chords that unintentionally erase the modal centre.

Choose a mode by mood and function

Modes are not fixed emotions, but their characteristic intervals can support different colours. Compose short examples and compare the sound rather than memorising adjectives.

Mode colour notes

Dorian: minor + raised 6 Phrygian: major-scale pattern with ■2 Lydian: major + ■4 Mixolydian: major + ■7
Establish the tonic first; characteristic notes help the listener hear the modal colour.

Logic Pro practical

Create a D Dorian loop using D as the bass/tonic. Compare it with D natural minor by changing B to B-flat. Keep rhythm and arrangement the same so the characteristic sixth is easy to hear.

Listening exercise

Listen for the characteristic note in Dorian, Phrygian, Lydian and Mixolydian examples. Sing the tonic drone while the melody moves.

Common mistakes

- Assuming the first scale note establishes the mode automatically.
- Using modal labels without establishing a tonal centre.
- Choosing chords that pull strongly to a different tonic.
- Treating mood descriptions as universal rules.

Completion task

Create two 8-bar loops in the same tonic: one natural minor, one Dorian. Identify the characteristic note and explain how the harmony supports the centre.

Lesson 5: Triads and Chord Construction

Learning objective: Build major, minor, diminished and augmented triads and understand root, third and fifth.

Stacking thirds

A triad contains three pitch classes commonly understood as root, third and fifth. Chords are often built by stacking alternate scale notes, but interval quality determines the chord type.

Four basic triad qualities

Major triad: root, major third, perfect fifth. Minor: root, minor third, perfect fifth. Diminished: root, minor third, diminished fifth. Augmented: root, major third, augmented fifth. Learn the intervals, not just keyboard shapes.

Chord symbols and inversions

A chord symbol such as C, Cm, Cdim or Caug identifies a root and quality. In root position the root is lowest; first inversion puts the third in the bass; second inversion puts the fifth in the bass. Inversion changes voicing, not chord identity.

Chord tones and melody

Chord tones tend to sound stable over the chord; non-chord tones can create tension and resolve. A melody's note may change function as the underlying chord changes.

Voicing and register

The same chord can sound dense or open depending on spacing, octave and instrument. Close voicings place notes near each other; open voicings spread them. Avoid crowding important low frequencies with tightly stacked notes.

Triad construction

Major: 1 – 3 – 5 Minor: 1 – $\flat$ 3 – 5 Diminished: 1 – $\flat$ 3 – $\flat$ 5 Augmented: 1 – 3 – $\sharp$ 5

Chord quality is determined by intervals above the root.

Logic Pro practical

In Logic Pro, build C, Cm, Cdim and Caug as MIDI chords. Listen to each, then invert C major and compare the bass movement. Use different instruments and registers to hear how voicing affects density.

Listening exercise

Sing the root, third and fifth of a major triad, then change only the third to hear major versus minor. Compare the tension of diminished and augmented triads.

Common mistakes

- Memorising chord shapes without understanding intervals.
- Confusing inversion with a different chord quality.
- Placing too many close notes in the low register.
- Assuming major always means happy and minor always means sad.

Completion task

Write four triads from three different roots, label every chord tone and create one progression that uses at least one inversion.

Lesson 6: Seventh and Extended Chords

Learning objective: Build seventh chords and understand extensions as added colour tones above basic triads.

Adding the seventh

A seventh chord adds a seventh above the root to a triad. Common qualities include major seventh, dominant seventh, minor seventh, half-diminished seventh and diminished seventh. The exact interval pattern determines the symbol.

Extensions beyond the seventh

Ninths, elevenths and thirteenth extend chord colour by adding notes above the octave. In practical voicings, some chord tones may be omitted or redistributed because instruments have limited range and too many close notes can sound cluttered.

Chord symbols are instructions, not voicings

A symbol describes harmonic content but not the exact register, spacing or note doubling. The arranger chooses a voicing that supports the melody and instrumentation.

Tension and resolution

Dominant seventh chords often create a strong pull toward a tonic, especially in tonal harmony. Other seventh and extended chords can sound open, smooth, tense or colourful depending on context.

Voice leading with extensions

Move each voice as economically as possible. Common tones can remain while other notes move by step. This helps sophisticated chords sound connected instead of like unrelated blocks.

Seventh chord colours

Cmaj7: C E G B C7: C E G B $\blacksquare$ Cm7: C E $\blacksquare$ G B $\blacksquare$ Cm7 $\blacksquare$ 5: C E $\blacksquare$ G $\blacksquare$ B $\blacksquare$

A single chord tone—especially the seventh or fifth—can change the chord's quality and function.

Logic Pro practical

Create Cmaj7, C7, Cm7 and Cm7 $\blacksquare$ 5 in Logic Pro. Compare each against a C bass note, then create a simple four-chord progression with smooth voice leading.

Listening exercise

Compare Cmaj7 and C7, then Cm7 and Cm7 $\blacksquare$ 5. Identify the seventh and describe how its interval changes the chord's pull or colour.

Common mistakes

- Assuming every extension must be played in a close stack.
- Confusing dominant seventh with major seventh.
- Ignoring melody notes that clash with an extension.
- Choosing voicings only by hand shape or visual symmetry.

Completion task

Write four seventh chords and two extended-chord voicings. Label notes, chord symbols, omitted notes if any, and the reason for each voicing.

Lesson 7: Diatonic Harmony and Roman Numerals

Learning objective: Build chords from a scale and analyse harmonic function using Roman numerals.

Diatonic chords

Diatonic triads are built by stacking notes from a chosen scale. In a major key, the common triad qualities follow I major, ii minor, iii minor, IV major, V major, vi minor and vii° diminished.

Roman numeral notation

Uppercase numerals usually represent major chords and lowercase numerals minor chords; a degree symbol often marks diminished chords. Numerals describe a chord's scale-degree root, so the same pattern can be transposed to another key.

Function and tendency

Tonic chords often feel stable; predominant chords commonly prepare dominant harmony; dominant chords often create tension that resolves toward tonic. These are useful tonal tendencies, not rigid laws for every style.

Harmonic rhythm

Harmonic rhythm describes how frequently chords change. A chord every bar creates a different sense of motion from two chords per bar or one chord across four bars.

Analyse and then create

Roman numerals help recognise patterns and transpose them. They do not replace listening: bass movement, voicing, melody and style affect how a progression feels.

Diatonic triads in a major key

I ii iii IV V vi vii° Maj min min Maj Maj min dim

Roman numerals describe scale-degree roots and chord qualities in context.

Logic Pro practical

In C major, create the diatonic triads I–vii° in Logic Pro and label their Roman numerals. Then transpose the same numeral pattern to G major, checking the correct notes and accidentals.

Listening exercise

Listen to I–V–vi–IV and ii–V–I progressions. Sing the bass roots and identify where tension increases and where resolution feels strongest.

Common mistakes

- Using uppercase numerals for every chord regardless of quality.
- Confusing a chord's letter name with its function in a key.
- Assuming every progression must resolve to I.
- Transposing by copying shapes without checking note spelling.

Completion task

Analyse an 8-bar progression with Roman numerals, then transpose it to a second key and explain any changed notes.

Lesson 8: Inversions and Voice Leading

Learning objective: Create connected chord progressions by controlling bass notes and minimising unnecessary movement between voices.

Why voice leading matters

A progression is not only a sequence of chord names. Each note moves from one chord to the next. Smooth voice leading can make changes feel connected; large jumps can be powerful when intentional.

Common tones and stepwise motion

Keep common notes where practical and move other voices by the smallest useful interval. This can reduce abruptness and create melodic lines inside the harmony.

Inversions and bass line

An inversion places a chord tone other than the root in the bass. Inversions can create a stepwise bass line or connect chords without changing their underlying harmonic identity.

Register and spacing

Avoid low-register clusters that make harmony muddy. Spread upper chord tones when needed and keep the bass role clear. Different instruments can carry different chord tones rather than all playing the full chord.

Voice leading is not a ban on leaps

Smooth movement is a tool, not a rule that forbids dramatic leaps, parallel motion or doubled notes. Follow the musical intention and listen to the resulting lines.

Voice-leading example

C: C – E – G Am: C – E – A F: C – F – A G: B – D – G

Keeping common tones and moving other voices by small intervals can connect chords smoothly.

Logic Pro practical

Program a four-chord progression in Logic Pro twice: first with all root-position triads, then with inversions that create a smoother bass line. Compare the bass and top voice while the progression loops.

Listening exercise

Follow the highest note through a progression. Notice whether it stays, moves by step or leaps. Then listen to the bass separately and identify the path it creates.

Common mistakes

- Changing chord names when only the inversion changed.
- Moving every voice by large intervals unnecessarily.
- Making voicings too low and dense.
- Treating smooth voice leading as an absolute rule.

Completion task

Create two versions of the same progression and annotate each voice's movement. Explain why you prefer one version for the arrangement.

Lesson 9: Chord Progressions and Emotion

Learning objective: Use harmonic patterns, rhythm and arrangement to support a song's emotional direction without relying on clichés.

Progressions are context

A progression's effect depends on tempo, rhythm, melody, voicing, sound design, lyrics and performance. The same chords can support very different moods when arrangement and phrasing change.

Common functional patterns

I–V–vi–IV, vi–IV–I–V and ii–V–I are common examples with different stylistic histories. They are starting points, not guaranteed formulas. Learn to hear the bass roots and the tension/resolution pattern.

Cadences and expectation

A cadence is a harmonic gesture that shapes closure or continuation. Authentic, plagal, half and deceptive cadences create different degrees of arrival and expectation in tonal styles.

Rhythm changes the same harmony

A sustained chord, a syncopated stab and a rolling arpeggio can make the same progression feel spacious, urgent or intimate. Harmonic rhythm is part of arrangement.

Write beyond the loop

A song benefits from contrast: verse, pre-chorus, chorus, bridge or other forms can use harmonic rhythm, register and density to build a narrative. Repetition creates identity; variation keeps attention.

Harmonic direction

Tonic (stable) → Predominant (prepares) → Dominant (tension) → Tonic (arrival)

This is a common tonal tendency, not a rule that every style must follow.

Logic Pro practical

Choose a four-chord progression in Logic Pro. Make three 8-bar versions: sustained piano chords, rhythmic syncopated chords, and broken-chord arpeggios. Keep the harmony identical and compare the emotional effect.

Listening exercise

Analyse the bass roots and cadence at the end of a verse and chorus. Notice how melody and arrangement affect whether the ending feels resolved or open.

Common mistakes

- Assuming a chord progression alone guarantees emotion.
- Repeating a loop without developing the song form.
- Adding complexity when a simpler progression serves the melody.
- Copying a famous progression without adapting rhythm and voicing.

Completion task

Write an 8- or 16-bar progression for a defined lyrical/emotional brief. Include Roman numerals, rhythm, voicing and a note explaining the intended contrast between sections.

Lesson 10: Melody and Counter-Melody

Learning objective: Create memorable melodic lines using contour, rhythm, phrase structure, chord tones and controlled tension.

Contour and range

Contour is the shape of a melody as it rises, falls, repeats or holds. A limited range can feel intimate; a wider range can create lift. Register should suit the instrument and vocal range.

Motifs and repetition

A motif is a short identifiable musical idea. Repeating it helps listeners remember it; changing rhythm, ending note or direction can develop it without losing identity.

Chord tones and passing tones

Chord tones often provide stability on strong beats. Passing tones, neighbour tones, suspensions and other non-chord tones add motion when they resolve or are supported by the harmony.

Phrase and breath

Melodies often form phrases that answer one another. Leave space for breathing, lyrics and instrumental responses. A melody that fills every beat can reduce impact.

Counter-melody and arrangement

A counter-melody supports rather than competes with the lead. It may answer the lead between phrases, use a different register or rhythm, and reduce density when the lead needs focus.

Melody and counter-melody

Lead phrase: motif → variation → phrase ending Counter-line: answer in the gaps

Use register, rhythm and rests to prevent supporting lines from competing with the lead.

Logic Pro practical

Create a four-bar melody over a simple chord progression. Start with a two-bar motif, repeat it with one change, then add a counter-melody only in the gaps between lead phrases. Check register and density.

Listening exercise

Hum the main hook after one listen. Identify repeated motifs, phrase endings, high points and moments where a secondary line answers the lead.

Common mistakes

- Filling every gap with notes.
- Writing counter-melody in the same register and rhythm as the lead.
- Ignoring chord tones on important beats.
- Making every phrase peak at the same point.

Completion task

Submit an 8-bar melody with a clear motif, one variation and a counter-melody. Mark phrase boundaries and identify stable versus tension notes.

Lesson 11: Arrangement and Musical Form

Learning objective: Structure musical ideas into sections with contrast, development and purposeful transitions.

Form creates expectation

Verse, chorus, pre-chorus, bridge, intro and outro are common section roles, but forms vary. A section's function is defined by how it contributes to the song's narrative, not simply its label.

Contrast through arrangement

Contrast can come from register, density, rhythm, instrumentation, harmony, dynamics and space. A chorus can feel larger through stronger hooks or wider arrangement rather than making every track louder.

Energy and transitions

Build energy by adding rhythmic activity, increasing register, changing chord rhythm, using fills or removing elements before a downbeat. Transitions should prepare the next section rather than distract from it.

Motif development

Reuse musical ideas with changes in instrumentation, harmony, rhythm or register. Recurrence creates cohesion; variation gives the listener a reason to keep listening.

Plan the arc

Map section lengths and energy before producing every detail. A simple arrangement map helps identify sections that are too long, transitions that arrive too early and hooks that need more space.

Section energy map

Intro → Verse → Pre-chorus → Chorus → Verse → Chorus → Bridge → Final chorus → Outro
Contrast can come from density, register, rhythm, harmony and instrumentation—not just volume.

Logic Pro practical

In Logic Pro, create an 8- or 16-bar arrangement map with markers for intro, verse, chorus, second verse, bridge and final chorus. Use track stacks or regions to build contrast, and automate one transition intentionally.

Listening exercise

Choose a song and map its sections. Note where instruments enter or leave, how the energy changes, and what makes the chorus feel distinct from the verse.

Common mistakes

- Adding layers without a clear section purpose.
- Making every section equally dense.
- Using fills that distract from the main hook.
- Ignoring the emotional arc while focusing only on loop length.

Completion task

Create a 60–90 second arrangement with at least three contrasting sections. Submit a section map and explain three production choices that support the arc.

Lesson 12: Ear Training and Transcription

Learning objective: Develop practical listening skills for identifying pitch, intervals, rhythm, bass movement, chord quality and arrangement.

Train one skill at a time

Ear training works best when the task is specific. Practise interval direction, scale degrees, chord quality, rhythmic dictation or bass movement separately before combining them.

Active listening

Listen to a short phrase, sing or tap it back, then check your answer on an instrument or in the DAW. Repetition with feedback is more useful than repeatedly listening without a task.

Transcription workflow

Start with tempo and pulse, then find the bass roots, phrase lengths, melody contour and chord changes. Slow playback can help, but preserve pitch if possible and return to normal speed to check feel.

Relative pitch and reference notes

A known pitch can provide a starting point, but relative pitch helps identify relationships between notes. Singing scale degrees and intervals builds an internal reference over time.

Ethical and practical use

Transcription is a learning method. For released work, respect copyright and licensing requirements; do not assume that educational analysis grants permission to publish copied material.

Transcription workflow

Pulse/tempo → Bass roots → Phrase lengths → Melody → Chord changes → Verify by listening
Break complex listening into manageable layers and check each hypothesis against the source.

Logic Pro practical

Pick a short, licensed or self-created 4-bar phrase. In Logic Pro, identify its pulse, tap the rhythm, transcribe the bass roots, then enter the melody into MIDI. Compare the transcription to the source and note uncertainties.

Listening exercise

Daily 5-minute routine: clap a rhythm, sing an interval, identify major/minor triad quality, and follow the bass in a short song section.

Common mistakes

- Trying to transcribe every instrument at once.
- Guessing chords before identifying the bass or tonic.
- Not singing or tapping before checking.
- Confusing a practice transcription with permission to publish a copy.

Completion task

Submit a 4-bar transcription of your own or appropriately licensed audio, with tempo, rhythm, bass roots, melody notes and a reflection on what was hardest.