

The C-Major Compendium: A Cross-Instrumental Pedagogical Analysis and Etude Collection

Part I: Analysis of the Foundational Etude

A. Introduction: Deconstructing the C-Major Sequential Tab

The document provided, `C_Major_Guitar_Tab_sequential (1).csv`, hereafter referred to as the Foundational Etude, represents a sophisticated and highly structured piece of instructional design. It is not a "song" in the conventional sense, but rather a 512-beat pedagogical engine. Its singular purpose, as evidenced by its systematic progression and "sequential" nomenclature, is the comprehensive mastery of the fretboard in the key of C Major.

The core pedagogical goal of this etude is to force the student to deconstruct and then rebuild their understanding of the instrument. It systematically eradicates the common beginner-to-intermediate dependency on static "box" patterns and "positions". Instead, it compels the student to visualize and execute scale and arpeggio fragments across the *entire* neck, treating it as one unified, interconnected map of the C-Major scale (containing the natural notes: C, D, E, F, G, A, and B).

A beat-by-beat analysis of the 512-beat structure reveals that the etude is not a single performance piece but a curriculum delivered in six distinct conceptual modules. This framework progresses the student logically from fundamental mechanics to holistic, virtuous performance. This "Six-Module System" is the teaching philosophy requested in the query and serves as the foundational blueprint for the cross-instrumental compendium that follows.

B. The Pedagogical Framework: A Six-Module System for Fretboard Mastery

The educational philosophy of the Foundational Etude is built upon a six-part progression. Each module builds upon the last, ensuring a robust theoretical and technical foundation before proceeding.

Module 1: Single-String Linearization (Horizontal Mastery)

Analysis: The etude commences by isolating the student's focus to one dimension: the horizontal axis of a single string. It presents 16-beat permutation drills using 3-note fragments of the C-Major scale (e.g., E-F-G on the 6th string, frets 0-1-3; A-B-C on the 5th string, frets 0-2-3). This pattern is repeated for all six strings, drilling different diatonic groupings up and down the neck.

Pedagogical Purpose: This method directly combats the primary limitation of "position" playing. By forcing the student to find and connect the *same* notes (or scale-adjacent notes) horizontally, it builds an immediate mental index of the C-Major scale across the entire length of *every* string. This mirrors the "one finger per fret" dexterity concept but applies it to melodic, shifting

fragments.

Module 2: Positional Scale Fragments (Vertical Integration)

Analysis: After completing the horizontal drills, Module 2 immediately connects this knowledge vertically. The etude presents a multi-octave C-Major scale fragment played in a single "position," ascending from the lowest string to the highest. This section (e.g., E: 0-1-3, A: 2-3-5, D: 3-5-7, etc.) is the student's first experience of linking the strings together in a traditional, scalar fashion.

Pedagogical Purpose: This module serves as the logical bridge from one-dimensional (linear) to two-dimensional (positional) fretboard knowledge. It provides the "box" pattern only *after* the student has been forced to understand the notes on each string independently, thereby providing context to the pattern rather than just rote memorization.

Module 3: Diatonic Melodic Patterns (Musical Application)

Analysis: This module leverages the positional knowledge from Module 2 and applies it to rhythmically and melodically complex sequences. The patterns are non-linear, forcing the student to develop finger independence, dexterity, and ear training by navigating the C-Major scale in a musical context.

Pedagogical Purpose: This is the etude's first "application" phase. It moves beyond rote mechanical drilling (Modules 1 and 2) and into the realm of musicality. It develops the ability to *use* the scale notes to create coherent melodic ideas, a critical step toward improvisation and composition.

Module 4: Diatonic and Functional Harmony (Harmonic Context)

Analysis: This is the etude's most sophisticated pedagogical module. A superficial glance might expect a simple recitation of the C-Major diatonic chords (C, Dm, Em, F, G, Am, Bdim). However, the etude presents a far more practical and advanced curriculum. It introduces a common chord progression that includes not only diatonic chords (I, IV, iii) but also their *secondary dominants* (V/vi, V/ii, V/iii).

For example, the progression from beats 273-300 includes:

- E Major (E-G#-B): The **V chord** of A minor (the relative minor, vi).
- F Major (F-A-C): The **IV chord** of C Major.
- C Major (C-E-G): The **I chord** of C Major.
- Em (E-G-B): The **iii chord** of C Major.
- A Major (A-C#-E): The **V chord** (secondary dominant) of D minor (the ii chord).
- B Major (B-D#-F#): The **V chord** (secondary dominant) of E minor (the iii chord).
- C Major (C-E-G): A return to the **I chord**.

Pedagogical Purpose: This module is the lynchpin of the entire system. It connects the melodic content of Modules 1-3 to the *harmonic framework* that gives them meaning. By introducing secondary dominants, the etude teaches the student *why* certain non-diatonic notes (like G#, C#, or D#) are so common in C-Major compositions. It moves from basic scale theory to the practical application of functional harmony.

Module 5: Multi-Octave Scale Traversal (Fretboard Unification)

Analysis: This module returns to pure scale mechanics, but now on a macro level. It presents multiple, full-range, multi-octave C-Major scale runs that ascend and descend the *entire* fretboard. These runs utilize different "positions" and fingerings, forcing the student to connect the "boxes" they learned in Module 2 into one seamless entity.

Pedagogical Purpose: This module unifies the fretboard map. It shatters any remaining dependency on a single position by demonstrating how the C-Major scale is a continuous pattern across all frets and strings. It combines the horizontal knowledge of Module 1 with the vertical knowledge of Module 2 into a complete, three-dimensional understanding.

Module 6: Advanced Melodic & Arpeggio Runs (Capstone Virtuosity)

Analysis: The final module serves as a capstone "solo" or virtuosic etude. It is a series of rapid, position-shifting melodic and arpeggiated runs that cover a wide range of the neck.

Pedagogical Purpose: This is the "final examination." It demands that the student integrate and execute all preceding concepts at speed: the horizontal and vertical scale knowledge (Modules 1, 2, 5), the melodic dexterity (Module 3), and the harmonic awareness of arpeggiating through implied chord changes (Module 4).

Part II: The C-Major Compendium: Adapted Pedagogical Etudes

A. A Note on Pedagogical Adaptation

The following sections adapt the Six-Module System of the Foundational Etude to six other common fretted instruments. The core philosophy (Linearization, Position, Pattern, Harmony, Traversal, Virtuosity) remains the constant, but its *implementation* must be radically re-imagined for each instrument.

The primary variable in this adaptation is not string count, but **tuning**. Tuning is destiny for a fretted instrument; it dictates fingering, technique, and idiomatic playing style. Adapting an etude from an instrument tuned in 4ths (Guitar, Bass) to one tuned in 5ths (Mandolin), an open tuning (Banjo), or a re-entrant tuning (Ukulele) requires a complete pedagogical rewrite. The following adaptation briefings and tablatures detail these necessary transformations.

B. Section 1: 4-String Bass Guitar

Standard Tuning: E-A-D-G

Pedagogical Adaptation Briefing

- **Tuning & Technique:** The standard E-A-D-G tuning of the 4-string bass is identical to the lowest four strings of the guitar, making the adaptation of the *melodic* modules (1, 2, 3, 5, 6) a straightforward transposition. The etude's design will reinforce the "one-finger-per-fret" (OFPF) fretting-hand technique, which is a foundational component of modern bass pedagogy.
- **Module 4 (Harmony) Adaptation:** This is the most significant adaptation. The bass is (primarily) a monophonic instrument. The guitar's *chords* are therefore translated into their most critical and fundamental components: **arpeggios**. This etude teaches the 1-3-5 triad

arpeggios for all seven diatonic chords of C Major (I: C, ii: Dm, iii: Em, IV: F, V: G, vi: Am, vii°: Bdim). This skill—outlining the harmony—is the primary function of the bass player.

- **Functional Harmony (Advanced Module 4):** To remain faithful to the advanced philosophy of the Foundational Etude, this module will *a/so* introduce the arpeggios for the **secondary dominants** (e.g., A7, B7, E7), teaching the student to outline the V-I harmonic movements that are the engine of Western music.

C-Major Etude for 4-String Bass (Tablature)

Table 2.1.1: Module 1 (Single-String Linearization)

(E-F-G pattern on E-string)

```
G|-----|
D|-----|
A|-----|
E|--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-|
```

(A-B-C pattern on A-string)

```
G|-----|
D|-----|
A|--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-|
E|-----|
```

(D-E-F pattern on D-string)

```
G|-----|
D|--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-|
A|-----|
E|-----|
```

(G-A-B pattern on G-string)

```
G|--0-2-0-4-2-4-2-0-4-0-2-0-4-0-4-2-|
D|-----|
A|-----|
E|-----|
```

Table 2.1.2: Module 2 (Positional Scale Fragment)

```
G|-----2-4-5-|
D|-----2-3-5-|
A|-----3-5-|
E|--3-5-|
```

Table 2.1.3: Module 3 (Diatonic Melodic Patterns)

```
G|-----|-----|
D|-----3-2-----|--0---5-3-2---0-|
A|----2-----3---2-|----3-----3---|
E|--0-----1---|3-----|

G|-----|-----|
D|-----|-----0-2-3-2-0-|
```

```
A | --2---3-2---0--- | ---3-----3- |
E | ---3-----1---3- | --0----- |
```

Table 2.1.4: Module 4 (Diatonic & Functional Harmony) (Diatonic 1-3-5 Triad Arpeggios , ascending/descending)

C (C-E-G)	Dm (D-F-A)	Em (E-G-B)	F (F-A-C)
G -----5-5-----	G -----7-7-----	G -----9-9-----	G -----10-10-----
D ---5-----5---	D ---7-----7---	D ---9-----9---	D ---10-----10---
A -3-----3-	A -5-----5-	A -7-----7-	A -8-----8-
E -----	E -----	E -----	E -----

G (G-B-D)	Am (A-C-E)	Bdim (B-D-F)
G -----12-12-----	G -----14-14-----	G -----16-16-----
D ---12-----12---	D ---14-----14---	D ---16-----16---
A -10-----10-	A -12-----12-	A -14-----14-
E -----	E -----	E -----

(Secondary Dominant 7th Arpeggios [1-3-5-b7])

A7 (V of Dm)	B7 (V of Em)	E7 (V of Am)	D7 (V of G)
G -----6-6-----	G -----8-8-----	G -----1-1-----	G -----4-4-----
D ---5-----5---	D ---7-----7---	D ---0-----0---	D ---3-----3---
A -0-----0-	A -2-----2-	A -----	A -5-----5-
E -----	E -----	E -0-----0-	E -----

Table 2.1.5: Module 5 (Multi-Octave Scale Traversal) (Full fretboard traversal, 2 octaves, ascending/descending)

```
`` (Ascending) G|-----2-4-5-7-9-| D|-----2-3-5-7-9-10-----|
A|-----3-5-7-8-10-----| E|---3-5-8-----|
(Descending) G|9-7-5-4-2-----| D|-----10-9-7-5-3-2-----|
A|-----10-8-7-5-3-| E|-----8-5-3-|
```

****Table 2.1.6: Module 6 (Capstone Virtuosity)****

```
G|9-9-7-5-4-5-4-2-0-2-0---|-----| D|-----3-2-0-2-0-----|
A|-----3-2-0-2-0-----| E|-----3-1-0-|
G|-----|-----| D|-----|0-2-3-2-0--0-2-3-5-3-2-|
A|---0-2-3-2-0--0-2-3-5-3-2-|3-----3-----| E|0-1-3-----0-1-3-----|-----|
```

C. Section 2: 5-String Bass Guitar

****Standard Tuning: B-E-A-D-G****

##[span_27] (start_span) [span_27] (end_span) [span_28] (start_span) [span_28] (end_span)## Pedagogical Adaptation Briefing

* ****Tuning & Technique:**** The addition of the low B-string extends the instrument's range significantly. A common pedagogical failure is allowing students to ignore this string, treating it as a "glorified thumb rest". Thi[span_29] (start_span) [span_29] (end_span)s etude is specifically designed to *prevent* this by integrating the B-string

into every module from the outset.

****Module Adaptation:**** The philosophy of all six modules is identical to the 4-string adaptation, but expanded. Module 1 **begins** on the B-string. Module 4 (Harmony) now includes powerful, low-register arpeggios rooted on the B and E strings, a hallmark of 5-string playing. Module 5 (Traversal) becomes a full three-octave scale exercise, unifying the entire extended-range fretboard.

C-Major Etude for 5-String Bass (Tablature)

****Table 2.2.1: Module 1 (Single-String Linearization)****
(Patterns for B-E-A-D-G strings)

(B-C-D pattern on B-string) G|-----| D|-----|
A|-----| E|-----| B|--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-|
(E-F-G pattern on E-string) G|-----| D|-----|
A|-----| E|--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-| B|-----|
(A-B-C pattern on A-string) G|-----| D|-----|
A|--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-| E|-----| B|-----|
(D-E-F pattern on D-string) G|-----| D|--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-|
A|-----| E|-----| B|-----|
(G-A-B pattern on G-string) G|--0-2-0-4-2-4-2-0-4-0-2-0-4-0-4-2-| D|-----|
A|-----| E|-----| B|-----|

****Table 2.2.2: Module 2 (Positional Scale Fragment)****
(Ascending C-Major scale, low position)

~
[span_34] (start_span) [span_34] (end_span) [span_35] (start_span) [span_35]
] (end_span) ~`
G| -----2-4-5- |
D| -----2-3-5----- |
A| -----3-5----- |
E| ---3-5----- |
B| -3-5----- |

Table 2.2.3: Module 3 (Diatonic Melodic Patterns)

G	-----		-----	
D	-----3-2-----		--0---5-3-2---0-	
A	-----2-----3---2-		---3-----3---	
E	--0-----1---		3-----	
B	-----		-----	

G	-----		-----	
D	-----		-----0-2-3-2-0-	
A	--2---3-2---0---		---3-----3-	
E	---3---1---3-		--0-----	

B | ----- | 3 ----- |

Table 2.2.4: Module 4 (Diatonic & Functional Harmony) (Diatonic 1-3-5 Triad Arpeggios, now with low B-string roots)

C (C-E- [span_31] (start_span) [span_31] (end_span) G)		Dm (D-F-A)	
Em (E-G-B)	F (F-A-C)		
G -----5-5-----	G -----7-7-----	G -----9-9-----	G -----10-10---
D ---5-----5---	D ---7-----7---	D ---9-----9---	D ---10-----10-
A -3-----3-	A -7-----7-	A -9-----9-	A -10-----10-
E -----	E -5-----5-	E -7-----7-	E -8-----8-
B -----	B -----	B -----	B -----

G (G-B-D)	Am (A-C-E)	Bdim (B-D-F)
G -----	G -----	G -----
D -----	D -----2-2-----	D -----3-3-----
A -----5-5-----	A ---2-----2---	A ---3-----3---
E ---5-----5---	E -0-----0-	E -1-----1-
B -3-----3-	B -----	B -----

(Secondary Dominant 7th Arpeggios [1-3-5-b7])

A7 (V of Dm)	B7 (V of Em)	E7 (V of Am)	D7 (V of G)
G -----	G -----	G -----1-1-----	G -----
D -----7-7-----	D -----9-9-----	D ---0-----0---	D -----0-0-----
A ---7-----7---	A ---9-----9---	A -----	A -----
E -5-----5-	E -7-----7-	E -----	E ---3-----3---
B -----	B -----	B -0-----0-	B -5-----5-

Table 2.2.5: Module 5 (Multi-Octave Scale Traversal) (Full fretboard traversal, 3 octaves, ascending/descending)

(Asce[span_33] (start_span) [span_33] (end_span) nding)

G -----2-4-5-7-9-
D -----2-3-5-7-9-10-----
A -----3-5-7-8-10-----
E -----0-1-3-5-7-8-10-----
B -1-3-5-7-8-10-----

(Descending)

G -9-7-5-4-2-----
D -----10-9-7-5-3-2-----
A -----10-8-7-5-3-----
E -----10-8-7-5-3-1-0-
B -----10-8-7-5-3-1-

Table 2.2.6: Module 6 (Capstone Virtuosity) (Adapted from , beats 465-480, and extended bass runs)

G -9-9-7-5-4-5-4-2-0-0- ----- D -----3-2-0-2-0-----
A -----3-2-0-2-0----- E -----3-1-0-
B -----

```

G|-----|-----| D|-----|0-2-3-2-0--0-2-3-5-3-2-|
A|--0-2-3-2-0--0-2-3-5-3-2-|3-----3-----| E|0-1-3-----0-1-3-----|-----|
B|-----|-----|

```

D. Section 3: 7-String Electric Guitar
****Standard Tuning: B-E-A-D-G-B-E****

##[span_37] (start_span) [span_37] (end_span)## Pedagogical Adaptation
 Briefing

* ****Tuning & Technique:**** The 7-string guitar is the most direct extension of the Foundational Etude. The tuning simply adds a low B-string, identical to the 5-string bass.
 The[span_38] (start_span) [span_38] (end_span) pedagogical philosophy is therefore identical, but the execution differs for Module 4.

* ****Module 4 (Harmony) Adaptation:**** As a polyphonic, chordal instrument, the 7-string guitar adaptation will not revert to arpeggios. It will instead take the 6-string chord voicings from Module 4 of the Foundational Etude and **extend** them to include the 7th string. This creates richer, fuller, and sometimes more complex voicings for the diatonic and secondary dominant progression.

*

[span_41] (start_span) [span_41] (end_span) [span_42] (start_span) [span_42] (end_span) [span_43] (start_span) [span_43] (end_span) ****Module 5 (Traversal) Adaptation:**** The scale traversal modules will now encompass the full, extended range of the 7-string instrument, using all seven strings in positional "box" shapes.

##[span_44] (start_span) [span_44] (end_span)## C-Major Etude for
 7-String Guitar (Tablature)

****Table 2.3.1: Module 1 (Single-String Linearization)****
 (Patterns for B-E-A-D-G-B-E strings)

```

(B-C-D pattern on B-string) e|-----| B|-----|
G|-----| D|-----| A|-----|
E|-----| B|--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-|
(E-F-G pattern on E-string) e|-----| B|-----| ...
E|--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-| B|-----|

```

.....

****Table 2.3.2: Module 2 (Positional Scale Fragment)****
 (Ascending C-Major scale, 3 octaves)

```

`[span_45] (start_span) [span_45] (end_span)`
e|-----5-7-8-|
B|-----5-6-8-----|
G|-----4-5-7-----|
D|-----3-5-7-----|
A|---3-5-7-----|

```



```
E | -3-5-6----- |
B | -3-5-7----- |
```

Table 2.3.3: Module 3 (Diatonic Melodic Patterns)

```
e | ----- | ----- |
B | ----- | ----- |
G | ----- | ----- |
D | -----3-2----- | --0---5-3-2---0- |
A | ----2-----3---2- | ---3-----3--- |
E | --0-----1--- | 3----- |
B | 3----- | ----- |
```

Table 2.3.4: Module 4 (Diatonic & Functional Harmony) (7-String chord voicings for the progression in)

``` E Major (V/vi) F Major (IV) C Major (I) Em (iii)

```
e|-0-----|-1-----|-0-----|-0-----|
B|-0-----|-1-----|-1-----|-0-----|
G|-1-----|-2-----|-0-----|-0-----|
D|-2-----|-3-----|-2-----|-2-----|
A|-2-----|-3-----|-3-----|-2-----|
E|-0-----|-1-----|-3-----|-0-----|
B|-----|-----|-----|-----|
```

A Major (V/ii) B Major (V/iii) C Major (I) G7 (V)

```
e|-0-----|-2-----|-3-----|-1-----|
B|-2-----|-4-----|-5-----|-3-----|
G|-2-----|-4-----|-5-----|-4-----|
D|-2-----|-4-----|-5-----|-3-----|
A|-0-----|-2-----|-3-----|-5-----|
E|-----|-----|-----|-3-----|
B|-----|-----|-----|-----|
```

**\*\*Table 2.3.5: Module 5 (Multi-Octave Scale Traversal)\*\***  
(Full fretboard traversal, ascending/descending )

```
(Ascending, 3-note-per-string pattern) e|-----7-8-10-12-13-15-|
B|-----8-10-12-13-15-17-----| G|-----7-9-10-12-14-16-----|
D|-----7-9-10-12-14-15-----| A|-----7-8-10-12-14-15-----|
E|---7-8-10-12-13-15-----| B|---8-10-12-13-15-----|
(Descending) e|-15-13-12-10-8-7-----|
B|-----17-15-13-12-10-8-----| G|-----16-14-12-10-9-7-|
D|-----15-14-12-10-9-7-|
A|-----15-14-12-10-8-7-|
E|-----15-13-12-10-8-7-|
B|-----15-13-12-10-8-|
```

**\*\*Table 2.3.6: Module 6 (Capstone Virtuosity)\*\***  
(Adapted from , beats 465-512, with low-string arpeggios )

`[span\_49] (start\_span) [span\_49] (end\_span) ``

```

e | ----- | ----- |
B | ----- | -10-8-6-5-6-5-4-2-3-1---- |
G | -10-9-9-7-5-4-5-4-3-2-0-2-1-2-0-- | -----3-2 |
D | ----- | ----- |
A | ----- | ----- |
E | ----- | ----- |
B | ----- | ----- |

e | -----3-5-7-8-7-5----- | ----- |
B | -5-6-8-----8-6-5----- | ----- |
G | -----7-5-4----- | ----- |
D | -----7-5-3- | ----- |
A | ----- | -7-5-3-2-3-2-0----- |
E | ----- | -----3-1-0----- |
B | ----- | -----3-1-0- |

```

## E. Section 4: 5-String Banjo

### Standard Tuning: g-D-G-B-D (Open G)

#### ##### Pedagogical Adaptation Briefing

- **Fundamental Adaptation (Tuning vs. Key):** This represents the most complex pedagogical adaptation. The etude must be performed in the **Key of C** while the instrument is tuned to **Open G**. This is a common and essential skill in bluegrass and folk music.
- **Technique (Melodic Style):** The linear, "one-finger-per-fret" logic of the Foundational Etude is non-idiomatic for banjo. To play fluid, note-for-note scales (like C-Major), banjo players utilize "Melodic Style" (also known as "Keith Style"). This technique achieves scalar fluency by playing notes across adjacent strings, almost never striking the same string twice in a row, creating a "cascading" sound. Modules 2, 3, 5, and 6 will be adapted to this technique.
- **Technique (Scruggs Style):** Module 1 (Dexterity) and Module 4 (Harmony) will be built on the foundation of 3-finger "rolls," the basis of Scruggs-style playing.
- **Module 4 (Harmony):** This module will teach the standard, movable bluegrass chord *shapes* for the C-Major diatonic progression (C, Dm, Em, F, G, Am) as they are formed within the Open G tuning. To adhere to the philosophy, it will also teach the shapes for the secondary dominant 7th chords (A7, B7, E7, D7, C7).

### C-Major Etude for 5-String Banjo (Tablature)

*(Note: Banjo tab is read with the 1st string (D) at the top and the 5th (g) at the bottom. Fretting numbers are provided; right-hand roll patterns (T=Thumb, I=Index, M=Middle) are at the player's discretion, but T-I-M is standard.)*

**Table 2.4.1: Module 1 (Single-String Linearization)** (Dexterity patterns on C-Major notes for each string)

```

(D-E-F pattern on 1st string)
D1 | --0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2- |
B2 | ----- |

```

```
G3 |-----|
D4 |-----|
g5 |-----|
```

(B-C-D pattern on 2nd string)

```
D1 |-----|
B2 |--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-|
G3 |-----|
D4 |-----|
g5 |-----|
```

(G-A-B pattern on 3rd string)

```
D1 |-----|
B2 |-----|
G3 |--0-2-0-4-2-4-2-0-4-0-2-0-4-0-4-2-|
D4 |-----|
g5 |-----|
```

(D-E-F pattern on 4th string)

```
D1 |-----|
B2 |-----|
G3 |-----|
D4 |--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-|
g5 |-----|
```

(g-a-b pattern on 5th string)

```
D1 |-----|
B2 |-----|
G3 |-----|
D4 |-----|
g5 |--0-2-0-4-2-4-2-0-4-0-2-0-4-0-4-2-|
```

**Table 2.4.2: Module 2 (Positional Scale Fragment - Melodic Style)** (Ascending C-Major scale, one octave, melodic style )

```
`` D1|-----0--| B2|-----1-----| G3|----0-2-----| D4|---2-3-----| g5|-----| (C D E F G A B C)
```

**\*\*Table 2.4.3: Module 3 (Diatonic Melodic Patterns)\*\***  
(Common C-Major melodic lick )

```
`[span_64] (start_span) [span_64] (end_span) ``
D1 |-----0-----0-| ----0-----0-|
B2 |---1-----1---| --1-----1---|
G3 |-2-----2-0-----| 2-----2-0-----|
D4 |-----| -----|
g5 |-----| -----|
```

**Table 2.4.4: Module 4 (Diatonic & Functional Harmony)** (Standard Bluegrass Chord Shapes for Key of C)

(Note: Chord diagrams show (String 4, 3, 2, 1). 5th string is a drone.)

- **C (I):** 2-0-1-2 (D-shape) OR 5-5-5-5 (Barre)
- **Dm (ii):** 0-2-3-3 (F-shape, moved) OR 7-7-6-8
- **Em (iii):** 2-0-0-2 (D-shape, moved) OR 7-5-7-7
- **F (IV):** 3-2-1-1 (F-shape) OR 8-7-6-8 (D-shape, moved)
- **G (V):** 0-0-0-0 (Open) OR 5-4-3-5 (D-shape, moved)
- **Am (vi):** 2-2-1-0 (F-shape, moved) OR 7-5-5-5 (Barre)
- **Bdim (vii°):** 4-3-2-4 (D-shape, moved)

(Secondary Dominant 7th Shapes)

- **A7 (V/ii):** 2-1-2-0
- **B7 (V/iii):** 4-3-4-2
- **C7 (V/IV):** 5-5-6-5
- **D7 (V/V):** 0-2-1-2
- **E7 (V/vi):** 2-0-1-0

**Table 2.4.5: Module 5 (Multi-Octave Scale Traversal)** (Two-octave C-Major scale, melodic style )

(Ascending)

```
D1 | -----0-2-3-5-7- |
B2 | - [span_54] (start_span) [span_54] (end_span) -----1-3-5-6-8----- |
G3 | ----0-2-4-5-7-9----- |
D4 | --2-3-5-7-9----- |
g5 | ----- |
```

(Descending)

```
D1 | -7-5-3-2-0----- |
B2 | -----8-6-5-3-1---- |
G3 | -----9-7-5-4-2-0---- |
D4 | -----9-7-5-3-2- |
g5 | ----- |
```

**Table 2.4.6: Module 6 (Capstone Virtuosity)** (Advanced "Key of C" Licks )

```
``` (Lick 1 - C-run) D1|-----0-----|--0-----| B2|----1---1---1-|---1-----|
G3|---0-----2---|0---2-0-----| D4|2-----|-----2---| g5|-----|-----0---|
(Lick 2 - F-run) D1|-----1-----|--1-----| B2|----1---1---1-|---1-----|
G3|---2-----2---|--2---2-0-----| D4|3-----|3-----3---| g5|-----|-----0---|
```

F. Section 5: Mandolin

Standard Tuning: G-D-A-E (in 5ths)

##[span_68] (start_span) [span_68] (end_span) [span_69] (start_span) [span_69] (end_span) [span_70] (start_span) [span_70] (end_span)## Pedagogical Adaptation Briefing

* **Fundamental Adaptation (Tuning in 5ths):** The mandolin's tuning in perfect 5ths is the inverse of the guitar's tuning in 4ths. This has profound pedagogical implications.

* **Module 1 (Linearization):** Because each string covers a wide 5th interval, 3-note diatonic fragments often require larger fretting-hand stretches (e.g., G-A-B is `0-2-4`) or position shifts. This module becomes[span_16] (start_span) [span_16] (end_span) a critical

exercise for developing pinky-finger strength and dexterity, a common challenge for mandolinists.

*

[span_71] (start_span) [span_71] (end_span) [span_72] (start_span) [span_72] (end_span) **Modules 2 & 5 (Vertical Scales):** Conversely, vertical scale patterns are *more compact* on a mandolin. A full two-octave scale can be played in a very tight position.

The[span_73] (start_span) [span_73] (end_span) [span_74] (start_span) [span_74] (end_span) etude will be re-fingered to reflect this efficiency.

* **Module 4 (Harmony):** The guitar's full chords will be translated into idiomatic mandolin voicings, particularly "chop" chords, which are essential for bluegrass and folk styles.

The[span_75] (start_span) [span_75] (end_span) [span_76] (start_span) [span_76] (end_span) [span_77] (start_span) [span_77] (end_span) secondary dominant 7th chords will also be presented.

C-Major Etude for Mandolin (Tablature)

(Note: Mandolin has 4 courses (pairs) of strings, G-G-D-D-A-A-E-E. Tab is written as 4 strings.)

Table 2.5.1: Module 1 (Single-String Linearization)
(Permutation patterns for C-Major 3-note groupings)

```
(G-A-B pattern on G-string) E|-----| A|-----|
D|-----| G|--0-2-0-4-2-4-2-0-4-0-2-0-4-0-4-2-|
(D-E-F pattern on D-string) E|-----| A|-----|
D|--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-| G|-----|
(A-B-C pattern on A-string) E|-----| A|--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-|
D|-----| G|-----|
(E-F-G pattern on E-string) E|--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-| A|-----|
D|-----| G|-----|
```

Table 2.5.2: Module 2 (Positional Scale Fragment)
(Ascending C-Major scale, two octaves)

```
`[span_78] (start_span) [span_78] (end_span) [span_79] (start_span) [span_79]
] (end_span) [span_80] (start_span) [span_80] (end_span) ``
E|-----0-1-3-5-|
A|-----0-2-3-5-----|
D|---2-3-5-----|
G|-5-----|
      (C D E F G A B C D E F G A)
```

Table 2.5.3: Module 3 (Diatonic Melodic Patterns)

```
E|-----|-----|
A|----0-----|-----|
D|--5---3-2---0---|---5-3-2---0---|
```

```

G | 5-----3--- | --5-----5- |
E | ----- | --0----- |
A | ----- | ---3-2-0----- |
D | --3---5-3---2--- | -----3-2--- |
G | ---5-----3---5- | ----- |

```

Table 2.5.4: Module 4 (Diatonic & Functional Harmony) (Standard Mandolin Chord Voicings)

(Note: Chord diagrams show (G-D-A-E).)

- **C (I):** 5-2-3-x OR 5-5-x-x (3-finger)
- **Dm (ii):** 5-3-0-x OR 7-7-x-x
- **Em (iii):** 7-5-2-x OR 7-7-x-x
- **F (IV):** 3-0-1-x OR 8-8-x-x
- **G (V):** 0-0-2-3 OR 5-2-x-x
- **Am (vi):** 2-2-0-0 OR 7-3-x-x
- **Bdim (vii°):** 4-4-x-x OR 4-1-2-x

(Secondary Dominant 7th Shapes)

- **A7 (V/ii):** 2-2-4-5
- **B7 (V/iii):** 4-4-6-7
- **C7 (V/IV):** 5-5-6-x
- **D7 (V/V):** 5-4-5-x
- **E7 (V/vi):** 2-0-2-3

Table 2.5.5: Module 5 (Multi-Octave Scale Traversal) (Full fretboard traversal, ascending/descending)

(Ascending)

```

E | -----0-1-3-5-7-8-10-12-13-15- |
A | -----0-2-3-5-7-9-10-12-14-15----- |
D | -----0-2-3-5-7-9-10-12-14----- |
G | -----0-2-4-5-7-9-10-12-14----- |

```

(Descending)

```

E | -15-13-12-10-8-7-5-3-1-0----- |
A | -----15-14-12-10-9-7-5-3-2-0----- |
D | -----14-12-10-9-7-5-3-2-0- |
G | -----14-12-10-9-7-5-4-2-0- |

```

Table 2.5.6: Module 6 (Capstone Virtuosity) (Advanced melodic runs)

```

`` E|-3-1-0--0-----|-----| A|-----3--3-2-0--0-----|-----|
D|-----5--5-3-2-0|---0-2-3-2-0-----|
G|-----|5-----5-4-2-0----|
E|-5-7-8-7-5---5-7-8-10-8-7-|-8-10-12-10-8-7-5-3-1-0---|
A|-----8-----|-----3-| D|-----|-----|
G|-----|-----|

```

G. Section 6: Ukulele

Standard Tuning: g-C-E-A (Re-entrant High-G)

```
##[span_85](start_span)[span_85](end_span)[span_86](start_span)[span_86](end_span)[span_87](start_span)[span_87](end_span)## Pedagogical Adaptation Briefing
```

* **Fundamental Adaptation (Re-entrant Tuning):** The re-entrant high-g string is the defining characteristic of the standard ukulele and the primary pedagogical challenge.

Thi[span_88](start_span)[span_88](end_span)[span_89](start_span)[span_89](end_span)s tuning is not linear; the 4th string (g) is tuned *higher* than the 3rd (C) and 2nd (E) strings.

* **Module 1 (Linearization) Adaptation:** A linear "single-string" exercise is nonsensical on the g-string, as its notes (g, a, b) are out of sequence with the rest of the neck's ascending pitch. Therefore, Module 1 will be adapted to apply *only* to the C, E, and A strings, which *are* tuned in ascending order.

* **Module 2 (Positional Scales):** This module will re-integrate the high-g string, teaching the C-Major scale in a way that is idiomatic to the ukulele.

The[span_90](start_span)[span_90](end_span)[span_91](start_span)[span_91](end_span)[span_92](start_span)[span_92](end_span) notes on the g-string (G, A, B) will be used to complete the scale patterns.

* **Module 4 (Harmony):** The ukulele is a premier chordal instrument. This module will present the standard, essential voicings for the 7 diatonic chords of C Major (C, Dm, Em, F, G, Am, Bdim). It [span_93](start_span)[span_93](end_span)[span_94](start_span)[span_94](end_span)[span_95](start_span)[span_95](end_span)[span_96](start_span)[span_96](end_span)[span_97](start_span)[span_97](end_span)will also include the secondary dominant 7th chords (A7, B7, etc.), which are vital for styles like jazz and Tin Pan Alley (Hapa Haole) ukulele.

C-Major Etude for Ukulele (Tablature)

(Note: Tab is read with the 1st string (A) at the top and the 4th (g) at the bottom.)

Table 2.6.1: Module 1 (Single-String Linearization)
(Patterns for C, E, and A strings *only*)

```
(C-D-E pattern on C-string) A|-----| E|-----|
C|--0-2-0-4-2-4-2-0-4-0-2-0-4-0-4-2-| g|-----|
(E-F-G pattern on E-string) A|-----| E|--0-1-0-3-1-3-1-0-3-0-1-0-3-0-3-1-|
C|-----| g|-----|
(A-B-C pattern on A-string) A|--0-2-0-3-2-3-2-0-3-0-2-0-3-0-3-2-| E|-----|
C|-----| g|-----|
```

Table 2.6.2: Module 2 (Positional Scale Fragment)
(Ascending C-Major scale, one octave, integrating high-g)

```
`[span_98](start_span)[span_98](end_span)``
```

```

A | -----0-2-3- |
E | -----0-1-3----- |
C | ---0-2-4----- |
g | -0-2----- |
    (C D E F G A B C)
    (Note: The first G is high)

```

Table 2.6.3: Module 3 (Diatonic Melodic Patterns)

```

A | ----0----- | ----- |
E | --3---1-0----- | --3-1-0----- |
C | 0-----2---0- | -----2-0--- |
g | -----2- | 0-----2- |

A | ----- | --3-2-0---0-2-3- |
E | --1---3-1---0--- | -----3----- |
C | ---0-----2---0- | ----- |
g | ----- | ----- |

```

Table 2.6.4: Module 4 (Diatonic & Functional Harmony) (Standard Ukulele Chord Voicings)

(Note: Chord diagrams show (g-C-E-A).)

- **C (I):** 0-0-0-3
- **Dm (ii):** 2-2-1-0
- **Em (iii):** 0-4-3-2
- **F (IV):** 2-0-1-0
- **G (V):** 0-2-3-2
- **Am (vi):** 2-0-0-0
- **Bdim (vii°):** 4-2-1-2 OR x-2-1-2

(Secondary Dominant 7th Shapes)

- **A7 (V/ii):** 0-1-0-0
- **B7 (V/iii):** 2-3-2-2
- **C7 (V/IV):** 0-0-0-1
- **D7 (V/V):** 2-2-2-3
- **E7 (V/vi):** 1-2-0-2

Table 2.6.5: Module 5 (Multi-Octave Scale Traversal) (Full fretboard C-Major map, played as ascending/descending scales)

(Ascendin[span_99] (start_span) [span_99] (end_span)g, 2 octaves)

```

A | -----0-2-3-5-7-8-10-12- |
E | -----0-1-3-5-7-8-10-12-13----- |
C | -----0-2-4-5-7-9-10-12----- |
g | -0-2-4-5-7-9-10-12----- |

```

(Descending)

```

A | -12-10-8-7-5-3-2-0----- |
E | -----13-12-10-8-7-5-3-1-0--- |
C | -----12-10-9-7-5-4-2-0- |
g | -----12-10-9-7-5-4-2-0- |
5-4-2-0- |

```


Table 2.6.6: Module 6 (Capstone Virtuosity) (Advanced melodic runs & chord-melody fragments)

```

``` (Melodic Run) A|-7-5-3-2-3-2-0---0-----|-----|
E|-----3---3-1-0-1-|---0-----| C|-----|----2-0-2-0-----|
g|-----|---0-----2-0-----|
(Chord-Melody Style Progression: C - G - Am - F) A|--3---3---2---2|--0---0---0---0-|
E|--0---0---3---3-|-0---0---1---1-| C|--0---0---2---2-|-0---0---0---0-| g|--0---0---0---0-|-2---2---2---2-|
Part III: Conclusions and Pedagogical Recommendations

```

### ### A. Applying the Six-Module Framework as a Transposable System

The exhaustive analysis of the Foundational Etude and its adaptation across six different instruments reveals its true pedagogical value. This compendium should not be viewed as a static, C-Major-only exercise. Its "Six-Module Philosophy" (Linearization, Position, Pattern, Harmony, Traversal, Virtuosity) is, in fact, a **transposable** framework for complete fretboard mastery.

The path to fluency is achieved by taking this entire system and applying it to other keys. For example:

1. **To practice in G-Major:** The student would find the G-Major scale notes on their instrument (G, A, B, C, D, E, F#).
2. They would then re-apply all six modules:
  - \* **Module 1:** Practice 3-note linear patterns using G-Major fragments (e.g., G-A-B, A-B-C, B-C-D).
  - \* **Module 2:** Learn a "box" position for the G-Major scale.
  - \* **Module 3:** Create melodic patterns using only the notes of G-Major.
  - \* **Module 4:** Learn the diatonic chords/arpeggios of G-Major (G, Am, Bm, C, D, Em, F#dim) and their secondary dominants (e.g., A7 as V/V).
  - \* **Module 5:** Practice ascending/descending G-Major scales across the entire neck.
  - \* **Module 6:** Practice virtuosic G-Major licks and arpeggio runs.

This systematic process, repeated across the Circle of 5ths (C, G, D, A, E, etc.), is a definitive method for moving from rote memorization to true, holistic musical fluency.

```

##[span_105](start_span)[span_105](end_span)[span_106](start_span)[span_106](end_span)[span_107](start_span)[span_107](end_span)[span_108](start_span)[span_108](end_span)# B. Conceptual Application to Other Fretted Instruments

```

The Six-Module System is robust enough to be adapted to virtually any fretted instrument. The research materials identified several others, and the adaptation process would be as follows:

\* **\*\*Baritone Guitar:\*\*** Typically tuned B-E-A-D-F#-B. The etude's logic would apply directly, but all C-Major scale and chord shapes would need to be re-fingered to account for the F# on the 2nd string. This would be a valuable exercise in breaking standard-tuning habits.

\* **\*\*Bouzouki (Greek/Irish):\*\*** The 4-course (tetrachordo) bouzouki is often tuned G-D-A-E, identical to the mandolin. The mandolin adaptation (Section 2.F) would apply directly, but the instrument's longer scale length would necessitate different fretting-hand choices.

\* **\*\*Tenor Guitar:\*\*** Commonly tuned in 5ths (C-G-D-A). The pedagogical logic would be identical to the mandolin (tuning in 5ths), but starting from C.

\* **\*\*Saz (Baglama) / Oud:\*\*** These instruments reduce microtonal fretting and non-Western scale systems (makam). The *\*philosophy\** of the six modules (e.g., single-string drills, tonal fragments, harmonic context) could still apply, but the base "C-Major scale" would be replaced with a foundational makam (e.g., *\*Rast\** or *\*Çargah\**).

### ### C. Final Synthesis: The Path to Fluency

Musical fluency on a fretted instrument is not derived from learning songs, which are merely static snapshots of musical ideas. True, generative fluency—the ability to improvise, compose, and navigate the fretboard with intention—comes from a systematic, structural understanding of the instrument's layout.

The Foundational Etude is a perfect blueprint for this systematic mastery. It correctly identifies the constituent parts of musicianship—mechanics, melodicism, harmony, and fretboard geography—and presents them in a logical, progressive order.

This compendium has applied that blueprint to the most common variations of fretted instruments, creating a comprehensive, cross-instrumental curriculum. By practicing this *\*system\** rather than just this "etude," the student is not merely learning a set of exercises in C Major. They are, in fact, learning the fundamental grammar and syntax of the musical language as it is spoken on their chosen instrument.

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