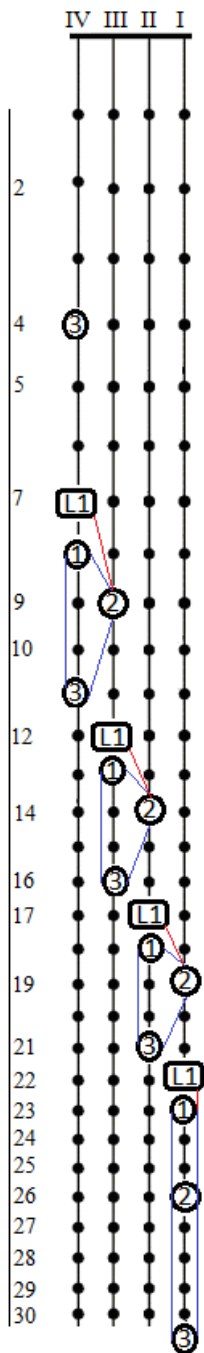
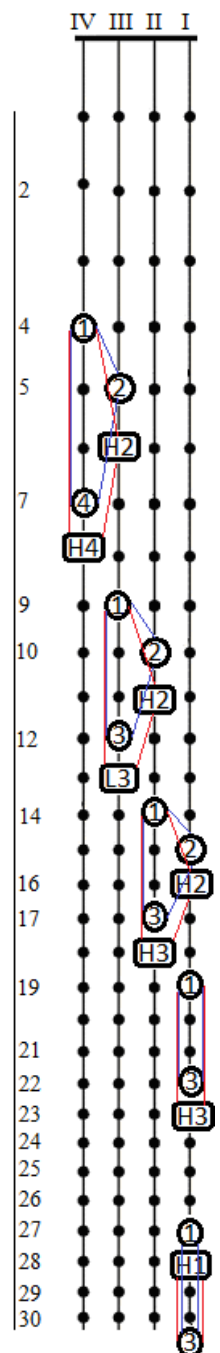


Cello Standards: Arpeggios on the Fingerboard

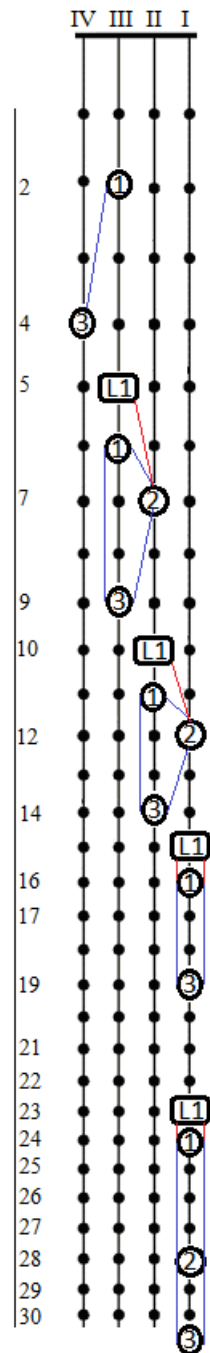
I / i
E Major / E minor



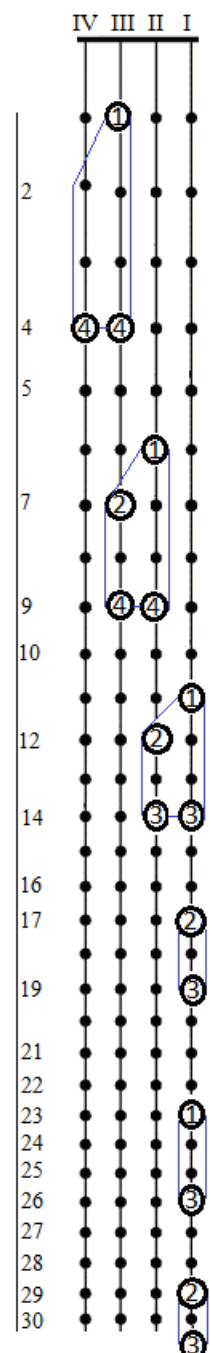
VI₄⁶ / vi₄⁶
C Major / C# minor



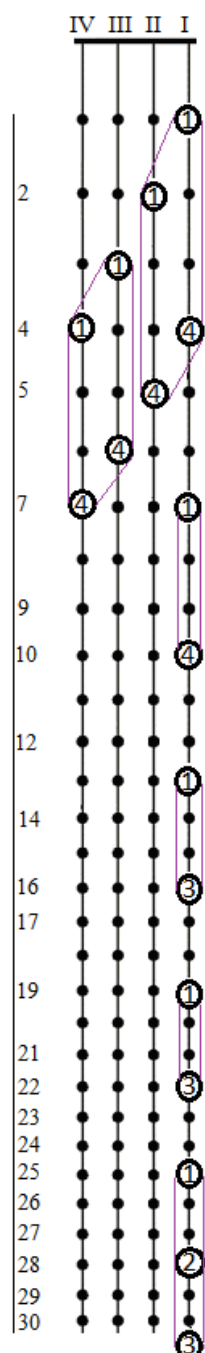
IV⁶ / iv⁶
A Major / A minor



V⁷
E⁷



vii^{o7}
e^{o7}



Cello Standards: Arpeggios

OBJECTIVES:

- Practice good shifting habits, opening elbow for the shift, preparing the shift in the left hand, shifting before the bow change
- Production of a relaxed, solid, resonant tone
- Practice with drones to comprehend perfect intonation
- Left hand round fingers, 4th finger, elbow to knuckle alignment, back of hand parallel to finger board, opening hand for extension positions, positional fingering

Intonating:

- Connection with the bow to the string
- Accurate pitch frequency (HZ) in the left hand in relation to the tonic
- Bow placement in reference to the fingerboard and bridge (Lanes)
- Resonating voice in the body of the instrument
- Vibrato (not used in scales and arpeggios)
- Practice intonation with double stops

Legato – keeping the connection through the bow changes

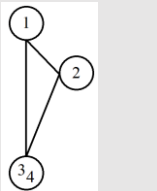
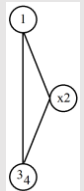
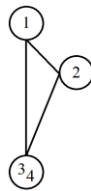
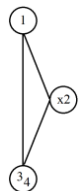
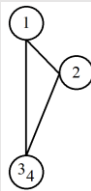
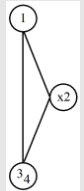
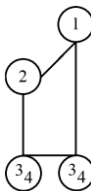
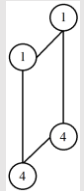
Bowings:

- not repeating note at the top of the scale
- One note per bow (whole notes)
- Three notes per bow (triplet notes)
- Four notes per bow (eighth notes)
- Six notes per bow (triplet notes)
- Eighth notes per bow (sixteenth notes)

Explain the parts of the diagram:

- Each fingerboard diagram is labeled with the name of the chord along with its respective Roman Numeral that indicates its function in the scale. Upper/lower case roman numerals indicate the chord quality (major/minor/seventh/diminished) and the smaller number next to it indicates its inversion.
- VI III II I represents the strings C G D A with A being the highest and I string. These symbols are frequently used in repertoire to denote which string the note is to be played. The VI III II I is ordered in this particular way so the diagram can be laid on the fingerboard.
- _____ represents the nut of the cello (open string)
- 4 vertical lines represent the four strings of the cello
- Dots on the vertical lines represent each chromatic note from the nut to the fingerboard
- Numbers to the left of the diagram are used as a quick reference that indicate the chromatic interval (5 = fourth, 7 = fifth, 12 = octave, 24 = 2nd octave)
- the circles with numbers represent the fingers used. Circles = Major arpeggio pattern, Squares = the lowered third in the minor arpeggio
- blue/red lines connect the major/minor group position

Cello Standards: Arpeggio Finger Patterns

Interval			Fingering		
	Chord	Notes	Start	Shape	Top
I	Major	1 3 5	1	1 4 2 [1 3 2] 	1...2...3
i	minor	1 b3 5	1	1 x 4 2 [1 x 3 2] 	1...2...3
VI ⁶	Major	b6 1 b3	Start =>	1 4 2 [1 3 2] 	1...3...1...3
vi ⁶	minor	6 1 3	Start =>	1 x 4 2 [1 x 3 2] 	1...3...1...3
IV ⁶ ₄	Major	4 6 1	1 - 4 [3 1]	1 4 2 [1 3 2] 	1...3...1...2...3
iv ⁶ ₄	minor	4 b6 1	1 - 4 [3 1] [4 2]	1 x 4 2 [1 x 3 2] 	1...3...1...2...3
V ⁷	Dominant Seventh	1 3 5 b7 (5 7 2 4)	1x4 1 [4 1 4]	2 4 1 4 [2 3 1 3] 	2.3...1...3...2.3
vii ^{o7}	Fully Diminished Seventh	1 b3 b5 bb7 (7 2 4 b6)	Start =>	1 4 - 1 4 [1 3 - 1 3] 	1...3...1...2...3

Cello Standards: Arpeggios

C Major					
	Chord	Notes	Start	Shape	Top
I	C	C E G	C	E G C	E G C
i	Cm	C E ^b G	C	E ^b G C	E ^b G C
VI ⁶	A ^b /C	A ^b C E ^b		C E ^b A ^b	C E ^b - A ^b C
vi ⁶	Am/C	A C E		C E A	C E - A C
IV ⁶ ₄	F/C	F A C	C F	A C F	A C - F A C
iv ⁶ ₄	Fm/C	F A ^b C	C F	A ^b C F	A ^b C - F A ^b C
V ⁷	C ⁷	C E G B ^b	C E G	B ^b C E G	B ^b C - E G - B ^b C
vii ^{o7}	C ^{o7}	C E ^b G ^b B ^{bb}		C E ^b - G ^b B ^{bb}	C E ^b - G ^b B ^{bb} C

C# Major					
	Chord	Notes	Start	Shape	Top
I	C#	C# E# G#	C#	E# G# C#	E# G# C#
i	C#m	C# E G#	C#	E G# C#	E G# C#
VI ⁶	A/C#	A C# E		C# E A	C# E - A C#
vi ⁶	A#m/C#	A# C# E#		C# E# A#	C# E# - A# C#
IV ⁶ ₄	F#/C#	F# A# C#	C# - F#	A# C# F#	A# C# - F# A# C#
iv ⁶ ₄	F#m/C#	F# A C#	C# - F#	A C# F#	A C# - F# A C#
V ⁷	C# ⁷	C# E# G# B	C# E# G#	B C# E# G#	B C# - E# G# - B C#
vii ^{o7}	C# ^{o7}	C# E G B ^b		C# E - G B ^b	C# E - G B ^b C#

D^b Major					
	Chord	Notes	Start	Shape	Top
I	D ^b	D ^b F A ^b	D ^b	F A ^b D ^b	F A ^b D ^b
i	D ^b m	D ^b F ^b A ^b	D ^b	F ^b A ^b D ^b	F ^b A ^b D ^b
VI ⁶	B ^{bb} /D ^b	B ^{bb} D ^b F ^b		D ^b F ^b B ^{bb}	D ^b F ^b - B ^{bb} D ^b
vi ⁶	B ^b m/D ^b	B ^b D ^b F		D ^b F B ^b	D ^b F - B ^b D ^b
IV ⁶ ₄	G ^b /D ^b	G ^b B ^b D ^b	D ^b - G ^b	B ^b D ^b G ^b	B ^b D ^b - G ^b B ^b D ^b
iv ⁶ ₄	G ^b m/D ^b	G ^b B ^{bb} D ^b	D ^b - G ^b	B ^{bb} D ^b G ^b	B ^{bb} D ^b - G ^b B ^{bb} D ^b
V ⁷	D ^{b7}	D ^b F A ^b C ^b	D ^b F A ^b	C ^b D ^b F A ^b	C ^b D ^b - F A ^b - C ^b D ^b
vii ^{o7}	D ^{bo7}	D ^b F ^b A ^{bb} C ^{bb}		D ^b F ^b - A ^{bb} C ^{bb}	D ^b F ^b - A ^{bb} C ^{bb} D ^b

D Major					
	Chord	Notes	Start	Shape	Top
I	D	D F# A	D	F# A D	F# A D
i	Dm	D F A	D	F A D	F A D
VI ⁶	B ^b /D	B ^b D F		D F B ^b	D F - B ^b D
vi ⁶	Bm/D	B D F#		D F# B	D F# - B D
IV ⁶ ₄	G/D	G B D	D G	B D G	B D - G B D
iv ⁶ ₄	Gm/D	G B ^b D	D G	B ^b D G	B ^b D - G B ^b D
V ⁷	D ⁷	D F# A C	D F# A	C D F# A	C D - F# A - C D
vii ^{o7}	D ^{o7}	D F A ^b C ^b		D F - A ^b C ^b	D F - A ^b C ^b D

E ^b Major					
	Chord	Notes	Start	Shape	Top
I	E ^b	E ^b G B ^b	E ^b	G B ^b E ^b	G B ^b E ^b
i	E ^b m	E ^b G ^b B ^b	E ^b	G ^b B ^b E ^b	G ^b B ^b E ^b
VI ⁶	C ^b /E ^b	C ^b E ^b G ^b		E ^b G ^b C ^b	E ^b G ^b - C ^b E ^b
vi ⁶	Cm/E ^b	C E ^b G		E ^b G C	E ^b G - C E ^b
IV ⁶ ₄	A ^b /E ^b	A ^b C E ^b	E ^b A ^b	C E ^b A ^b	C E ^b - A ^b C E ^b
iv ⁶ ₄	A ^b m/E ^b	A ^b C ^b E ^b	E ^b A ^b	C ^b E ^b A ^b	C ^b E ^b - A ^b C ^b E ^b
V ⁷	E ^{b7}	E ^b G B ^b D ^b	E ^b G B ^b	D ^b E ^b G B ^b	D ^b E ^b - G B ^b - D ^b E ^b
vii ^{o7}	E ^{bo7}	E ^b G ^b B ^{bb} D ^{bb}		E ^b G ^b - B ^{bb} D ^{bb}	E ^b G ^b - B ^{bb} D ^{bb} E ^b

E Major					
	Chord	Notes	Start	Shape	Top
I	E	E G [#] B	E	G [#] B E	G [#] B E
i	Em	E G B	E	G B E	G B E
VI ⁶	C/E	C E G		E G C	E G - C E
vi ⁶	C [#] m/E	C [#] E G [#]		E G [#] C [#]	E G [#] - C [#] E
IV ⁶ ₄	A/E	A C [#] E	E A	C [#] E A	C [#] E - A C [#] E
iv ⁶ ₄	Am/E	A C E	E A	C E A	C E - A C E
V ⁷	E ⁷	E G [#] B D	E G [#] B	D E G [#] B	D E - G [#] B - D E
vii ^{o7}	E ^{o7}	E G B ^b D ^b		E G - B ^b D ^b	E G - B ^b D ^b E

F Major					
	Chord	Notes	Start	Shape	Top
I	F	F A C	F	A C F	A C F
i	Fm	F A ^b C	F	A ^b C F	A ^b C F
VI ⁶	D ^b /F	D ^b F A ^b		F A ^b D ^b	F A ^b - D ^b F
vi ⁶	Dm/F	D F A		F A D	F A - D F
IV ⁶ ₄	B ^b /F	B ^b D F	F B ^b	D F B ^b	D F - B ^b D F
iv ⁶ ₄	B ^b m/F	B ^b D ^b F	F B ^b	D ^b F B ^b	D ^b F - B ^b D ^b F
V ⁷	F ⁷	F A C E ^b	F A C	E ^b F A C	E ^b F - A C - E ^b F
vii ^{o7}	F ^{o7}	F A ^b C ^b E ^{bb}		F A ^b - C ^b E ^{bb}	F A ^b - C ^b E ^{bb} F

F [#] Major					
	Chord	Notes	Start	Shape	Top
I	F [#]	F [#] A [#] C [#]	F [#]	A [#] C [#] F [#]	A [#] C [#] F [#]
i	F [#] m	F [#] A C [#]	F [#]	A C [#] F [#]	A C [#] F [#]
VI ⁶	D/F [#]	D F [#] A		F [#] A D	F [#] A - D F [#]
vi ⁶	D [#] m/F [#]	D [#] F [#] A [#]		F [#] A [#] D [#]	F [#] A [#] - D [#] F [#]
IV ⁶ ₄	B/F [#]	B D [#] F [#]	F [#] B	D [#] F [#] B	D [#] F [#] - B D [#] F [#]
iv ⁶ ₄	Bm/F [#]	B D F [#]	F [#] B	D F [#] B	D F [#] - B D F [#]
V ⁷	F ^{#7}	F [#] A [#] C [#] E	F [#] A [#] C [#]	E F [#] A [#] C [#]	E F [#] - A [#] C [#] - E F [#]
vii ^{o7}	F ^{o7}	F [#] A C E ^b		F [#] A - C E ^b	F [#] A - C E ^b F [#]

G^b Major					
	Chord	Notes	Start	Shape	Top
I	G ^b	G ^b B ^b D ^b	G ^b	B ^b D ^b G ^b	B ^b D ^b G ^b
i	G ^b m	G ^b B ^{bb} D ^b	G ^b	B ^{bb} D ^b G ^b	B ^{bb} D ^b G ^b
VI ⁶	E ^{bb} /G ^b	E ^{bb} G ^b B ^{bb}		G ^b B ^{bb} E ^{bb}	G ^b B ^{bb} - E ^{bb} G ^b
vi ⁶	E ^b m/G ^b	E ^b G ^b B ^b		G ^b B ^b E ^b	G ^b B ^b - E ^b G ^b
IV ⁶ ₄	C ^b /G ^b	C ^b E ^b G ^b	G ^b C ^b	E ^b G ^b C ^b	E ^b G ^b - C ^b E ^b G ^b
iv ⁶ ₄	C ^b m/G ^b	C ^b E ^{bb} G ^b	G ^b C ^b	E ^{bb} G ^b C ^b	E ^{bb} G ^b - C ^b E ^{bb} G ^b
V ⁷	G ^{b7}	G ^b B ^b D ^b F ^b	G ^b B ^b D ^b	F ^b G ^b B ^b D ^b	F ^b G ^b - B ^b D ^b - F ^b G ^b
vii ^{o7}	G ^{bo7}	G ^b B ^{bb} D ^{bb} F ^{bb}		G ^b B ^{bb} - D ^{bb} F ^{bb}	G ^b B ^{bb} - D ^{bb} F ^{bb} G ^b

G Major					
	Chord	Notes	Start	Shape	Top
I	G	G B D	G	B D G	B D G
i	Gm	G B ^b D	G	B ^b D G	B ^b D G
VI ⁶	E ^b /G	E ^b G B ^b		G B ^b E ^b	G B ^b - E ^b G
vi ⁶	Em/G	E G B		G B E	G B - E G
IV ⁶ ₄	C/G	C E G	G C	E G C	E G - C E G
iv ⁶ ₄	Cm/G	C E ^b G	G C	E ^b G C	E ^b G - C E ^b G
V ⁷	G ⁷	G B D F	G B D	F G B D	F G - B D - F G
vii ^{o7}	G ^{o7}	G B ^b D ^b F ^b		G B ^b - D ^b F ^b	G B ^b - D ^b F ^b G

A^b Major					
	Chord	Notes	Start	Shape	Top
I	A ^b	A ^b C E ^b	A ^b	C E ^b A ^b	C E ^b A ^b
i	A ^b m	A ^b C ^b E ^b	A ^b	C ^b E ^b A ^b	C ^b E ^b A ^b
VI ⁶	F ^b /A ^b	F ^b A ^b C ^b		A ^b C ^b F ^b	A ^b C ^b - F ^b A ^b
vi ⁶	Fm/A ^b	F A ^b C		A ^b C F	A ^b C - F A ^b
IV ⁶ ₄	D ^b /A ^b	D ^b F A ^b	A ^b D ^b	F A ^b D ^b	F A ^b - D ^b F A ^b
iv ⁶ ₄	D ^b m/A ^b	D ^b F ^b A ^b	A ^b D ^b	F ^b A ^b D ^b	F ^b A ^b - D ^b F ^b A ^b
V ⁷	A ^{b7}	A ^b C E ^b G ^b	A ^b C E ^b	G ^b A ^b C E ^b	G ^b A ^b - C E ^b - G ^b A ^b
vii ^{o7}	A ^{bo7}	A ^b C ^b E ^{bb} G ^{bb}		A ^b C ^b - E ^{bb} G ^{bb}	A ^b C ^b - E ^{bb} G ^{bb} A ^b

A Major					
	Chord	Notes	Start	Shape	Top
I	A	A C [#] E	A	C [#] E A	C [#] E A
i	Am	A C E	A	C E A	C E A
VI ⁶	F/A	F A C		A C F	A C - F A
vi ⁶	F [#] m/A	F [#] A C [#]		A C [#] F [#]	A C [#] - F [#] A
IV ⁶ ₄	D/A	D F [#] A	A D	F [#] A D	F [#] A - D F [#] A
iv ⁶ ₄	Dm/A	D F A	A D	F A D	F A - D F A
V ⁷	A ⁷	A C [#] E G	A C [#] E	G A C [#] E	G A - C [#] E - G A
vii ^{o7}	A ^{o7}	A C E ^b G ^b		A C - E ^b G ^b	A C - E ^b G ^b A

B^b Major					
	Chord	Notes	Start	Shape	Top
I	B ^b	B ^b D F	B ^b	D F B ^b	D F B ^b
i	B ^b m	B ^b D ^b F	B ^b	D ^b F B ^b	D ^b F B ^b
VI ⁶	G ^b /B ^b	G ^b B ^b D ^b		B ^b D ^b G ^b	B ^b D ^b - G ^b B ^b
vi ⁶	Gm/B ^b	G B ^b D		B ^b D G	B ^b D - G B ^b
IV ⁶ ₄	E ^b /B ^b	E ^b G B ^b	B ^b E ^b	G B ^b E ^b	G B ^b - E ^b G B ^b
iv ⁶ ₄	E ^b m/B ^b	E ^b G ^b B ^b	B ^b E ^b	G ^b B ^b E ^b	G ^b B ^b - E ^b G ^b B ^b
V ⁷	B ^b 7	B ^b D F A ^b	B ^b D F	A ^b B ^b D F	A ^b B ^b - D F - A ^b B ^b
vii ^{o7}	B ^{bo7}	B ^b D ^b F ^b A ^{bbb}		B ^b D ^b - F ^b A ^{bbb}	B ^b D ^b - F ^b A ^{bbb} B ^b

B Major					
	Chord	Notes	Start	Shape	Top
I	B	B D [#] F [#]	B	D [#] F [#] B	D [#] F [#] B
i	Bm	B D F [#]	B	D F [#] B	D F [#] B
VI ⁶	G/B	G B D		B D G	B D - G B
vi ⁶	G [#] m/B	G [#] B D [#]		B D [#] G [#]	B D [#] - G [#] B
IV ⁶ ₄	E/B	E G [#] B	B E	G [#] B E	G [#] B - E G [#] B
iv ⁶ ₄	Em/B	E G B	B E	G B E	G B - E G B
V ⁷	B ⁷	B D [#] F [#] A	B D [#] F [#]	A B D [#] F [#]	A B - D [#] F [#] - A B
vii ^{o7}	B ^{o7}	B D F A ^b		B D - F A ^b	B D - F A ^b B

C^b Major					
	Chord	Notes	Start	Shape	Top
I	C ^b	C ^b E ^b G ^b	C ^b	E ^b G ^b C ^b	E ^b G ^b C ^b
i	C ^b m	C ^b E ^{bb} G ^b	C ^b	E ^{bb} G ^b C ^b	E ^{bb} G ^b C ^b
VI ⁶	A ^{bb} /C ^b	A ^{bb} C ^b E ^{bb}		C ^b E ^{bb} A ^{bb}	C ^b E ^{bb} - A ^{bb} C ^b
vi ⁶	A ^b m/C ^b	A ^b C ^b E ^b		C ^b E ^b A ^b	C ^b E ^b - A ^b C ^b
IV ⁶ ₄	F ^b /C ^b	F ^b A ^b C ^b	C ^b F ^b	A ^b C ^b F ^b	A ^b C ^b - F ^b A ^b C ^b
iv ⁶ ₄	F ^b m/C ^b	F ^b A ^{bb} C ^b	C ^b F ^b	A ^{bb} C ^b F ^b	A ^{bb} C ^b - F ^b A ^{bb} C ^b
V ⁷	C ^b 7	C ^b E ^b G ^b B ^{bb}	C ^b E ^b G ^b	B ^{bb} C ^b E ^b G ^b	B ^{bb} C ^b - E ^b G ^b - B ^{bb} C ^b
vii ^{o7}	C ^{bo7}	C ^b E ^{bb} G ^{bb} B ^{bbb}		C ^b E ^{bb} - G ^{bb} B ^{bbb}	C ^b E ^{bb} - G ^{bb} B ^{bbb} C ^b