

Technical Exercises for the Double Bass

by Jeff Bradetich

• Slow Scales

Goals- Establish a good quality of sound. Find the optimum resonant point of bow placement on the string.

- Draw bow straight across the string, parallel to bridge.
- Develop consistent sound from frog to tip of bow by keeping bow on the same place on the string from frog to tip. Don't allow bow to float up and down string.
- Develop greater sustaining ability; practice bowing closer to the bridge
- Develop greater control of vibrato. Vibrate with steady oscillations throughout entire scale. Don't allow vibrato to stop during string crossings and as you prepare to shift.
- Develop greater speed and accuracy; always play with curved fingers of the left hand.
- Practice the same scale for an entire week; practice all keys. Start on F major.
- Work to play all scales three octaves.

• Shifting Drill

Goals- Establish a good quality of sound. Find the optimum resonant point of bow placement on the string.

- Draw bow straight across the string.
- Draw a consistent sound by keeping bow on same spot on the string from frog to tip regardless of where the left hand is playing.
- Start with slow shifts of the left hand. Hear and feel the distance the left hand travels to pinpoint intonation.
- Repeat each shift twice.
- Practice all different finger combinations: 1-1, 1-2, 1-3, 1-4, 2-1, 2-2, 2-3, 2-4, 4-1, 4-2, 4-3, 4-4. As the shifts begin in higher positions, practice the fingering 3-1, 3-2, 3-3, 3-4.
- Practice the same scale for an entire week. Move up one half step each week. Start on A major.
- Start with one octave shifts and work to do two octave shifts on the G string, then apply to other strings.
- Always play with curved fingers of left hand.
- Practice playing closer to bridge.
- Develop greater control of vibrato as described in Slow Scales above. Work on widening vibrato and making oscillations more emphatic and more expressive.

• Progressive Scales

Goals- Establish a good quality of sound. Find the optimum resonant point of bow placement on the string.

- Draw bow straight across the string.
- Draw a consistent sound.
- Start with four note patterns, then work on three note patterns, then much later work on 5 note patterns.
- Always start each group of the four note pattern with 1st finger.
- In four note pattern, always shift between 2nd and 3rd notes.
- Practice with at least two repetitions of each pattern.
- Start slow stressing proper mechanics, then work for speed by using less bow.

- Practice with different rhythms and different bowings.
- The goal of the exercise is to develop recognition and speed in playing the most common finger patterns in music.
- Practice the same scale for an entire week. Move up one half step each week. Start on A major. Work on one octave up the G string. Then apply to other strings.
- Substitute 3rd finger for 4th finger on F# on the G string (always!).

• Shiftless Scales

Goals- Establish a good quality of sound. Find the optimum resonant point of bow placement on the string.

- Draw bow straight across the string.
- Draw a consistent sound.
- Play entire one octave scale without shifting. In lower positions use: (A string) 2-4, (D string) 1-2-4, (G string) 1-3-4 fingering for E major and F major, etc.
- Rock and roll left hand to reach whole steps between 2-4, don't shift.
- Practice all different bowing patterns, especially hooked and 2 slurred, 2 separate.
- Practice 3, 4, and 5 note progressive scale patterns.
- All scales are movable and should work in most positions and keys.
- Work for speed.
- In thumb position, use the Bb fingering: (A) 1-3, (D) 0-1-3, (G) 0-2-3, and the C major fingering: (A) 2, (D) 0-1-2, (G) 0-1-2-3.

• String Crossing Drill

Goals- Establish a good quality of sound. Find the optimum resonant point of bow placement on the string.

- Draw bow straight across the string.
- Draw a consistent sound.
- Develop smooth and efficient string crossings.
- With French bow, develop use of right hand fingers to do most of the crossing motion, raising and lowering bow from string to string. Use very little arm motion. On German bow, make as little arm motion as possible. When playing one string, move bow as close to the next string as possible before crossing over to it in order to minimize the distance the bow must travel.
- Practice slurred first, then move on to separate bowings.
- Start very slowly, then work for speed.
- Practice one octave always starting with open string.
- Practice drill between G and D strings, then much later move on to other strings.
- To begin, it is easier to practice four note patterns, instead of three, so that the crossing motion is always the same. The primary challenge of the three note pattern is that it reverses the crossing motion every three notes.

• Thirds

Goals- Establish a good quality of sound. Find the optimum resonant point of bow placement on the string.

- Draw bow straight across the string.
- Draw a consistent sound.
- Establish finger patterns for major and minor thirds.
- Major thirds should always be played 1-2
- Minor thirds should always be played 1-4, or 1-3 in higher positions.
- 1st finger should always be used on the top string.
- Left hand fingers should always be curved.
- Practice different bowing patterns.
- Practice different rhythm and meter patterns.

- Practice shifting drill when playing double-stopped thirds.
- Start with one octave, then move on to two octaves.

- **Intonation/ Replacement Fingerings**

Goals- Establish a good quality of sound. Find the optimum resonant point of bow placement on the string.

- Draw bow straight across the string.
- Draw a consistent sound.
- Play each note twice. The first time, play it with a higher finger (2,3, or 4,) then replace it with 1st finger.
- When replacing the note with a new finger, work to match the pitch exactly. Then work to make the shift smooth and unnoticeable.
- Start on G major on the G string. Then add a drone open D at the same time to give a pitch reference.
- Practice slurring 2, 4 and then 8 notes in a bow.

3 Note Finger Pattern Drill



5 Note Finger Pattern Drill



1 4 1 2 4 4 2 1 4 1 1 3 4 1 3 3 1 4 3 1

1 2 4 1 3 3 1 4 2 1 1 3 1 2 3 3 2 1 3 1



1 3 1 2 3 3 2 1 3 1 1 2 3 1 3 3 1 3 2 1

1 2 3 1 2 2 1 3 2 1 2



3 2 1 3 1 1 3 1 2 3 3 1 3 2 1 1 2 3 1 3

3 1 4 3 1 1 3 4 1 3 4 2 1 4 1 1 4 1 2 4



4 3 1 2 1 1 2 1 3 4 4 1 2 1 0 0 1 2 1 4 4 2 1 0 2 2 0 1 2 4 2

4 Note Finger Pattern Drill

2 4

1 4 1 2 2 1 4 1 1 4 1 3 3 1 4 1

or
4

1 2 1 3 3 1 2 1 1 3 1 3 3 1 3 1

1 3 1 2 2 1 3 1 1 3 1 3 3 1 3 1

1 2 1 3 3 1 2 1 2

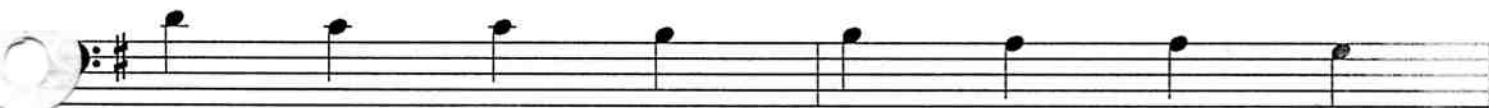
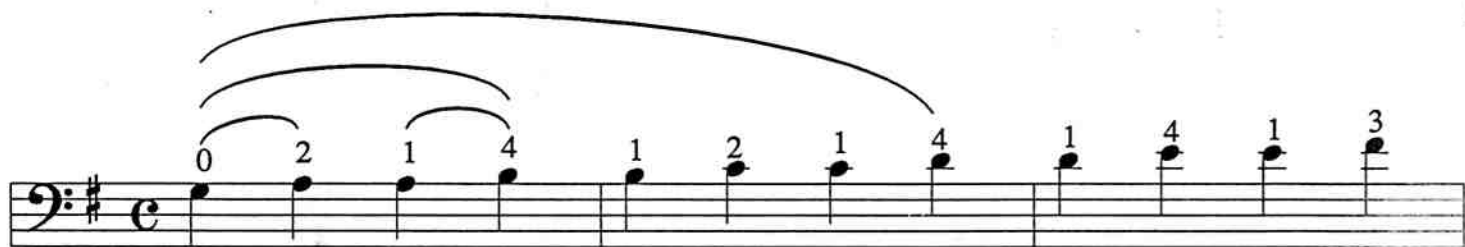
2 1 3 1 1 3 1 2 3 1 3 1 1 3 1 3

3 1 2 1 1 2 1 3 3 1 4 1 1 4 1 3

2 1 4 1 1 4 1 2 4 1 2 1 1 2 1 4

4 2 1 0 0 1 2 4 2

Intonation/Replacement Fingerings



Thirds Drill #1

Separate Notes

2 1 4 1 4 1 2 1 2 1

3 1 3 1 2 1 2 1 2 1

2 1 2 1 2 1 2 1 2 1

1 2 1 2 1 2 1 2 1 2

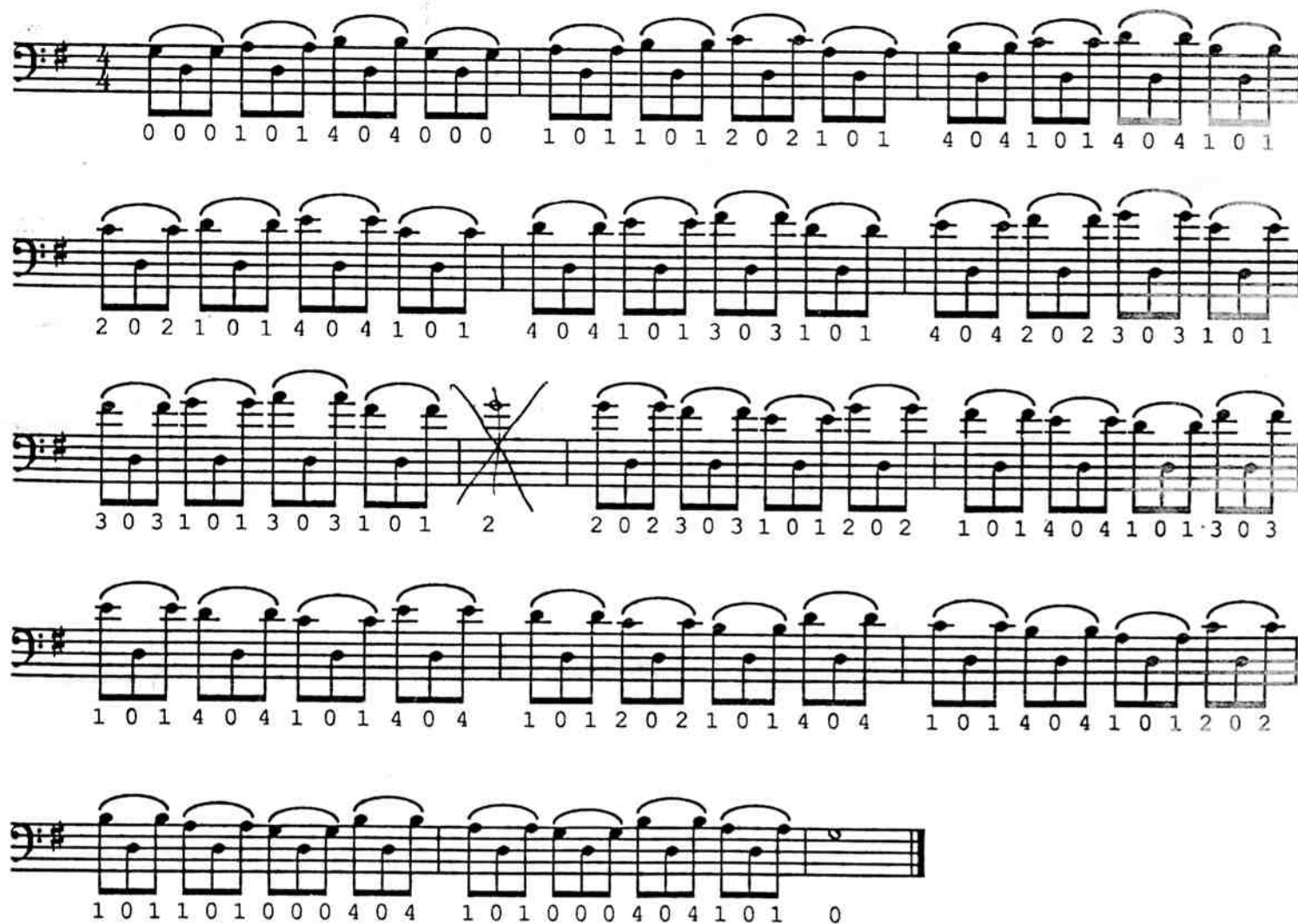
1 3 1 2 1 3 1 3

1 2 1 2 1 4 1 4 1 2 2

Shiftless Scale

The musical score for "Shiftless Scale" is written in D major (two sharps) and 4/4 time. It consists of six staves. The first staff contains the initial notes of the scale with fingerings: 2, 4, 1, 2, 4, 1, 3, 4, 4, 3, 1, 4, 2, 1, 4, 2. Below these are the letters A, D, G, O, and A. The second staff begins with the dynamic marking *sim.* and continues the scale. The third, fourth, fifth, and sixth staves continue the scale with increasing rhythmic complexity, featuring eighth and sixteenth notes. The piece concludes with a double bar line on the sixth staff.

String Crossing Drill



A musical score for a string crossing drill, consisting of five staves of music in bass clef, 4/4 time, with a key signature of one sharp (F#). The notation includes eighth and sixteenth notes, often beamed together, and rests. Below each staff is a sequence of numbers (0, 1, 2, 3, 4) indicating string positions. The first staff has 16 measures. The second staff has 16 measures. The third staff has a measure crossed out with a large 'X' in the middle, followed by 15 measures. The fourth staff has 16 measures. The fifth staff has 16 measures, ending with a double bar line.

0 0 0 1 0 1 4 0 4 0 0 0 1 0 1 1 0 1 2 0 2 1 0 1 4 0 4 1 0 1 4 0 4 1 0 1

2 0 2 1 0 1 4 0 4 1 0 1 4 0 4 1 0 1 3 0 3 1 0 1 4 0 4 2 0 2 3 0 3 1 0 1

3 0 3 1 0 1 3 0 3 1 0 1 2 2 0 2 3 0 3 1 0 1 2 0 2 1 0 1 4 0 4 1 0 1 3 0 3

1 0 1 4 0 4 1 0 1 4 0 4 1 0 1 2 0 2 1 0 1 4 0 4 1 0 1 4 0 4 1 0 1 2 0 2

1 0 1 1 0 1 0 0 0 4 0 4 1 0 1 0 0 0 4 0 4 1 0 1 0

Rhythms

Four Note Patterns

The image displays seven musical staves, each illustrating a different four-note rhythmic pattern. The patterns are numbered 1 through 7. Patterns 1, 2, and 3 are in common time (C). Pattern 1 consists of four eighth notes. Pattern 2 consists of four eighth notes. Pattern 3 consists of four eighth notes. Pattern 4 is in common time (C) and consists of four eighth notes. Pattern 5 is in common time (C) and consists of four eighth notes. Pattern 6 is in 2/4 time and consists of two groups of two eighth notes, each group marked with a '3' indicating a triplet. Pattern 7 is in common time (C) and consists of four eighth notes, with the first two notes marked with a '3' indicating a triplet.

The use of rhythms in practicing is particularly important for the development of speed, efficiency and control. Although the effectiveness of this type of practice can be felt in the short term, the use of rhythms is one of the best ways to improve over the long term. Any and all of these rhythms can be used when practicing any four note pattern. Generally they work best on four or more notes of the same rhythmic value. Variations 1 and 3 are perhaps the most valuable. This same set of principles can be applied to three and five note finger patterns as well.

Clark Thumb Drill #1

Fingering I

The musical score for Clark Thumb Drill #1, Fingering I, consists of six staves of music. Each staff begins with a treble clef, a key signature of one sharp (F#), and a 2/4 time signature. The first staff includes the following fingering numbers below the notes: + 1 3 + 1 3 + 1 3 + 1 3 + 1 3 + 1 3 + 1 3 + 3 1 + 1 + 3 1 +. The second staff is marked with *sim.* below the first measure. The subsequent staves continue the drill with various rhythmic patterns and fingering.

Clark Thumb Drill

Fingering II

The musical score consists of six staves of music, all in 3/4 time. The first staff is in G major (one sharp) and includes fingerings: 1 3 + 1 3 + 1 3 + 1 3 + 1 3 + 1 3 + 1 3 + 1 + 3 1 3 1 + 3 1. The second staff is in F major (one flat) and is marked *sim.* The third staff is in G major. The fourth staff is in F major. The fifth staff is in F major. The sixth staff is in G major. The music is a continuous sequence of eighth and sixteenth notes, primarily using the thumb and index finger.

Clark Thumb Drill #1

Fingering II

2 + 1 2 + 1 2 + 1 2 3 1 2 + 1 2 + 1 2 + 1 2 + 1 2 1 + 2 + 2 1 + 2

sim.