By the time you graduate from High School, you should be able to do the following on the flute:

- Memorize all fingerings from low C through high C, and be able to play an ascending and descending chromatic scale in 3 octaves;
- Memorize all trill fingerings;
- Show good posture and finger position;
- Play with a beautiful, full, focused sound with vibrato and make dynamic differences.
- Memorize all major scales in 2 octaves;
- Develop intonation skills;
- Read articulations accurately, tongue cleanly and rapidly, and use double and triple tonguing;
- Hold a long tone for 20 seconds in one breath;
- Have some knowledge of the solo flute literature.

I. TONE

A. Harmonics: a warm-up for flexibility between registers. To move to the high register:
   a. Increase airspeed
   b. Make aperture smaller
   c. Point lips forward (move from “ah” to “u” as in truth)

B. Vibrato
   1. Vibrato is a fluctuation of pitch, volume, and tone color.
   2. Vibrato is NOT produced with the diaphragm; slow vibrato is produced with the abdominal muscles, and faster vibrato with the throat.
   3. Vibrato speed should be 5-7 times per second. Practice a vibrato at 84 with 4 waves per pulse.
C. A Tone study in the low register:

**Slowly and Freely**

D. Tone study in the middle register:

E. Tone study in the high register:

II. TECHNIQUE

A. Fingerings

1. Regular Fingerings: In most cases, choose the fingering that has the best tone and intonation.
2. Always put R4 (right-hand pinky) down for E1 and E2.
   a. Exception: At a fast tempo when alternating between D and E, leave R4 off (but move L1).
3. ALWAYS keep L1 up for D2 and E-flat2.
4. In most cases, use R3 for F-sharp, and not R2.
   a. Exception: At a fast tempo when ALTERNATING between E and F-sharp, use R2.
5. Which B-flat?
   a. Thumb B-flat: please learn how and when to use this! You must avoid thumb B-flat when playing high F-sharp.
   b. Lever or side key (especially for A-sharp to B trills). Try using in G-flat and B major scales.
   c. One-and-one (use to avoid a shifty thumb, as in a chromatic scale).

B. Scales
   1. All major scales in two octaves, ascending and descending, and the chromatic scale from low C to high C, ascending and descending.

IV. Articulation
   1. The resonant staccato
      a. Practice tongueless attacks (Ha)
      b. Start but don’t end the note with the tongue (Tah not Tut)
   2. Double tonguing exercises
      a. Gu-Gu-Gu-Gu (back of the tongue)
      b. Gu-Du-Gu-Du (backwards double tongue)
      c. Du-Gu-Du-Gu (regular double tongue)
   3. Triple tonguing
      a. Regular: Du-Gu-Du Du-Gu-Du
      b. Compound: Du-Gu-Du Gu-Du-Gu

III. INTONATION AND DYNAMICS
   A. Playing in tune is the process of eliminating beats between two pitches
   B. Check the headjoint cork.
   C. The following factors influence intonation on the flute:
      
      | makes the pitch lower | makes the pitch higher |
      |------------------------|------------------------|
      | cold flute             | warm flute              |
      | headjoint pulled out   | headjoint pushed in    |
      | slow airstream         | fast airstream         |
      | air angled down into flute | air angled up over flute |

   D. Adjusting individual notes:
      if a note is flat          if a note is sharp
      roll the flute out         roll the flute in
      raise your head            lower your head
      use lips and jaw to blow high  drop your jaw and bring the upper lip down

   E. Keep the angle of the airstream the same for all registers.
   F. For any given note, there is one airspeed that provides proper intonation; a flutist needs to maintain the same airspeed through all dynamics.
   G. When playing forte, blow from the upper lip down (“DEPTH”); when playing piano, support the airstream with the lower lip (“SKIM THE SURFACE”).
   H. Exercise for dynamic contrast and adjustment of intonation:
      forte : B-B-flat-A piano (echo): B-B-flat-A

IV. SOLO REPERTOIRE
   A. The National Flute Association, P.O. Box 800397, Santa Clarita, CA 91380 or http://www.Nfaonline.org
      Selected Flute Repertoire: A Graded Guide for Teachers and Students
   B. Recommended solo collections
      1. Robert Cavally, 24 Short Concert Piece for Flute and Piano (Southern)
      2. Louis Moyse, Flute Music by of the Baroque (Schirmer)
      3. Donald Peck, Solos for Flute: 36 Repertoire Pieces (Carl Fischer)
      4. Himie Voxman, Concert and Contest Collection (Rubank)