Harmonizing A Theme

You have created themes in previous years. Now it's time to learn how to turn them into full arrangements with bass lines and chords to supplement a lovely melody.

CHOOSE THE TOOLS YOU WILL USE

Most of you work with instruments that only play a single note at a time (wind instruments can't play chords). But even if you don't have a piano or guitar, you can still do this assignment.

Wind and Strings players should consider using Flat.io or some other online notation software. You will be most successful with another tool that you can make play alongside you while you play your own instrument. You could also work with a partner, but it may involve discussing the transpositions between instruments.

Pianists and Guitarists should be able to do this assignment with nothing but their instrument, but could likewise do this assignment with the assistance of Flat.io software.

STEP 1 – GET USED TO THE MELODY

This means either copying the melody into Flat.io, or playing through it a few times yourself to know what the melody is. The melody is provided to you, and was originally created by Mr. Windsor.

UNDERSTANDING BASS LINES

As you have heard me say many, many times before, modern radio music (pop, rock, country) all tends to be simple so that it can easily be sung along to and played, so all modern radio music has similar chord progressions.

1. **Find The Root.** With few exceptions, the first bass note of a chorus is the **root**, or the **tonic** (*first* note in the scale). Use your listening skills and test it out on your instrument to determine that note. Oftentimes the Key Signature gives you a hint. We don't need to write the notes on manuscript paper, we will simply write that bass note name above the staff.
   If you don't have an instrument with you to work with, or if you need to work privately, you can also use the shared piano on Chrome Music Lab at https://musiclab.chromeexperiments.com/Share-Piano or https://onlinesequencer.net to help you find the root.
2. **Determine the Most Likely Chords.** Now that you know the root, determine what the next most likely bass notes will be. They include the following;
   a. **The Dominant**. Almost every song or piece of music in the world somehow gets to the dominant. This is the *fifth* note in the scale. Use the musical alphabet to determine what that note should be.
   b. **The Subdominant**. Many songs and pieces of music also use the subdominant, or the *fourth* note in the scale. This is because they are related. Use the musical alphabet to determine what that note should be.

   Subdominant is to Tonic/Root as the **Tonic/Root is to the Dominant**.   … just like …
   Daughter is Mother as **Mother is to Grandmother**

c. **The Submediant**. Many songs will also use the submediant, the note between the subdominant and the root (the *sixth* note of the scale). Use the musical alphabet to determine what that note should be.

d. **The Mediant**. Less commonly, songs will use the mediant, the note between the dominant and tonic (the *third* note of the scale). Use the musical alphabet to determine what that note should be.

3. **Put Them In Order**. I find its easier to do this directly on the melody I've already written. You'll be writing the bass note names above the bars of the melody.

a. **Establish the Key.** Songs usually have the bass play the root of the scale at the very beginning to establish the tonal centre for the listener. We'll write the root above the first bar.

b. **Find a place for the dominant.** The vast majority of songs have the dominant in an important location, like at the end of a phrase, or beginning a phrase. Our melody is clearly made up of two phrases that are four bars long each, so try placing the dominant at the end of the fourth bar, and try again at the beginning of the fifth bar to see where it fits best.

c. **End the melody.** You have two choices … do you want the melody to sound finished? Then end it with a root in the bass. Do you want it to sound like there should be more music afterward? Then end it with a different bass note, usually the dominant or the subdominant, but it could any of the others as well.

d. **Fill in the gaps with other "most likely chords".** You have some bars that don't have bass notes. Experiment with some of the most likely chords you chose in Step 2 to find the ones you want. You will need to decide how complicated you want your bass line. Do you want a new chord on every beat? Or is one chord per bar acceptable? Or, would you rather go half way and make a chord for every 2 beats? Or a combination of any of the above? It's your call.

TIME TO HARMONIZE

Now that you've selected the bass notes, you need to include the harmonies in between the melody and the bass. If your bass note is the root of the chord, then you need to have a third and a fifth in the chord somewhere. There is one big rule for this … **You should never have more than one dominant (fifth) of any chord at any given time.** Have multiple roots or mediants is okay, but multiple fifths is not, otherwise it makes your song sound like it's in the wrong key because of how strong the dominant is.

So, if your bass note is a root, and your melody note is the fifth of the chord, your harmony should have another root and a mediant. But if your bass note is a root, and your melody note is anything else, you can choose any of them to be your harmony.

In the examples here, the first bar has a mistake in the harmony. The bass line has an F, so the notes of the chord should be the first, third and fifth, or in this case, F-A-C. The melody has a C, which is the fifth, so the harmony *can't* have another fifth. In the first bar the composer put the fifth in the harmony, and that is where the mistake lies. The second bar shows a correction where there is only one fifth in the chord, and every other note is included.
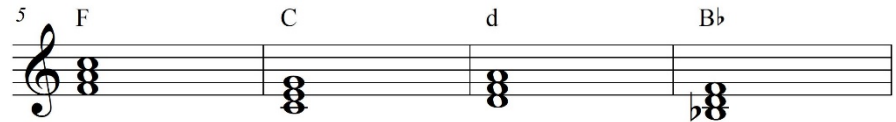
OPTIONAL - CHORDS AND WALKING BASS LINES.

Sometimes a songwriter will not want the bass line to do drastic jumps, so they will use passing tones instead of the actual notes. Here's the theory behind it.
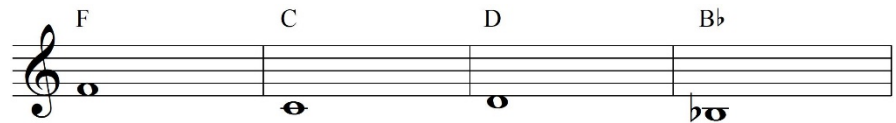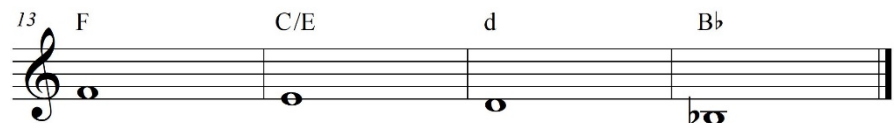
In this diagram, you see a common modern radio music bass line.

On the second line, you see what each chord would look like built on those same notes. Now that we've built the chords, we know that the submediant (D) is actually a *minor* chord, so we use lowercase (d) instead.
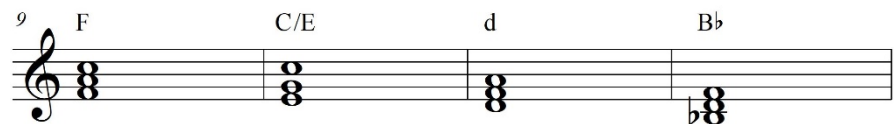
A walking base line takes advantage of the notes that exist inside these chords that aren't just the *root*. While in the first line, we used only the roots, in the third line we moved the root of the C chord (and only the root) up an octave. The result is a C chord in an inversion. We indicate this in modern music by way of something that looks like a fraction. We place the type of chord we want played as the "numerator" (on the left), and what note we want the bass player to play as the "denominator".

The finished result is a melody with a series of chords written on top of it to make the full arrangement. **But you must be careful not to break the rule of not having any more than one fifth (dominant) in a chord!**

OPTIONAL – PASSING TONES IN THE BASS CLEF

You may have some large jumps between the bass notes, as you saw in the above example moving from an F to a C. But perhaps you don't want to add more chords to the music, because that would be too complicated. You can add bass notes that pass from an F to a C using quarter notes to make the passing more comfortable.

THE ASSIGNMENT – HARMONIZING THE THEME

Your assignment is to harmonize the theme provided. Go through the steps outline in this file to get it all done.

You can complete this assignment either in Flat.io and Share it to **@windyjmusic** or **jwindsor@redeemer.ab.ca** or you can complete it on paper, take a photo of it, and submit it to the **#harmonizing** Discord channel.

HARMONIZING A SIMPLE MELODY

STUDENT NAME: _____

BASS LINE – ADD THE CLEF AND KEY SIGNATURE, THEN WRITE YOUR BASS LINE IN THE BOTTOM STAFF.

Flute

Cl., B. Cl.,
T. Sax, Tpt.

Alto Sax,
Bari Sax

French
Horn

Concert
Pitch

Bass Line
(Add Clef
and Key)

FULLY HARMONIZED THEME – ADD THE KEY AND TIME SIGNATURES, WRITE YOUR MELODY INTO THE TREBLE CLEF (MAKE SURE YOU KEEP YOUR STEMS UP), YOUR BASS LINE INTO THE BASS CLEF, AND ADD YOUR HARMONY INTO THE TREBLE CLEF UNDERNEATH THE MELODY (KEEPING YOUR STEMS DOWN).