

Even if you tune your instrument correctly, there are still some factors that will cause it to play out of tune. There are MANY factors that will affect pitch, but here is a summary of the most common:

FACTOR	AFFECT
Air Direction	If you direct your air stream upwards, it will raise the pitch and cause it to be sharper. If you direct your air stream downwards, it will lower the pitch and cause it to be flatter.
Embouchure Coverage	Putting too much of your bottom lip on the embouchure hole will cause the pitch to be flat. Putting too little of your bottom lip on the embouchure plate will cause the pitch to be sharp. Your bottom lip should be covering about a quarter to a third of the hole.
Breath Support	When there is an inadequate amount of breath support, it will cause the pitch to be flat. When the breath support is too strong, it will cause the pitch to be sharp. It is important to be careful with this as compensating for bad intonation can lead to the development of bad habits such as too much tension in the embouchure.
Temperature	Warm air temperature will cause the pitch to be sharp.  Cold air temperature will cause the pitch to be flat. For best results, play in a space that is around 72 degrees Fahrenheit.
Equipment	An instrument that is not in good working order will cause poor pitch overall.  Leaking tone holes, bent rods, or instrument misalignment are all signs of an instrument in need of a repair.  On a flute, a pad that is too closed will cause the pitch to play flat. A pad that is too open will cause the pitch to play sharp.  Have the instrument checked by an instrument repair shop once a year.
Dynamics	Playing louder dynamics will cause the pitch to be sharp. As the air velocity increases, direct more of the air stream into the hole. Playing softer dynamics will cause the pitch to be flat. As the air velocity decreases, direct more of the air stream across the hole.
Posture	It is essential that good posture is being used while playing the instrument. Poor posture will lead to uncharacteristic tone and poor pitch.