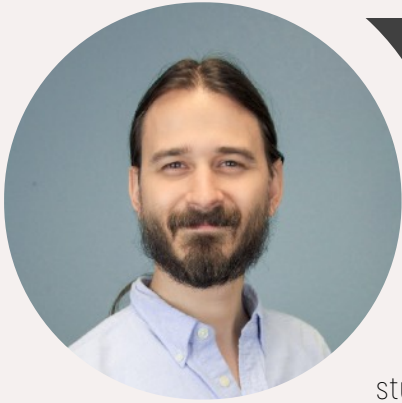


instructor corner

Tal Spackman, Violin Instructor



how does music work? (and why should we play it?)

Music is something I have studied, thought about, and practiced most of my life and yet only understood little. I thought this might be a fun chance to peek into the science behind music and also think about some of the reasons we study it.

The open A string on a violin, or five notes above middle C on the piano, has a frequency of 440 hertz (abbreviated as "hz"). This means that when you play that note, the air is compressing and decompressing four-hundred and forty times every second, vibrating your eardrum. An octave up, the next A has double that frequency, 880hz, and another octave would be double again, and so on.

Notes that sound good together tend to have a simple mathematical relationship. In "Also Sprach Zarathustra"—familiar to most as the opening of "2001: A Space Odyssey"—the first three notes are B, F-sharp, and another B. If we compare the frequencies of B and F-sharp, we get a ratio of 2:3.

When we hear this, though, we don't remark to ourselves "I really love when the notes have a ratio of two to three!" We don't hear the math at all, and some might be upset that I'm even trying to talk about math and music together. My point is this: although we can describe the nuts and bolts of music as basically "math you can hear", the end result is clearly far more than a quick aural calculation, and the question that has

always fascinated me is, "Why on Earth do our brains do this?"

As far as I know, our best guess is that the ability to hear different pitches allows us to decipher emotion and intention in human speech, and as a happy side effect, we also interpret certain combinations of abstract sounds as meaningful.

Whatever the reason, the fact that our brains hear music at all is absolutely wild, and I will probably be amazed by it until the day I die.

To take a brief turn, think about some of the reasons we listen to and study music: to stay mentally sharp, to pad a resume, to woo women/men, to make money, because our parents made us, to express something deeper than language, to motivate, to get attention, to understand ourselves, to connect to others, to reminisce, to gain status, to relax.

Any reason to study music is a good one. That said, some reasons are better than others. The technical challenges of learning an instrument can be diabolically frustrating and monotonous. We can temper those challenges by remembering that we aren't really here in pursuit of a grade, or a job, or a more impressive resume, although we may get all of those. We're here to engage with the grand mystery. We're here, ultimately, to play.





“Avani N.

always comes in prepared for her piano lessons. She is very motivated, loves to challenge herself to do better, and works hard to achieve it. She always comes to lessons with a big smile on her face, so big even a mask can't hide it! Keep up with all the good work girl!"

– Maria Crystalia, Piano Instructor

Congratulations to the students of **Dr. Maria Crystalia** who recently competed in the Alamo Music Playful Piano Performance Competition 2021!



Chloe W.

won 1st place in the beginner division

upcoming events



FEB 2

THOMAS FEDORCHIK'S BIRTHDAY



FEB 5

SARAH MIGAS BIRTHDAY



FEB 11

MARK HARRISON'S BIRTHDAY

Leilani T.

won 1st place in the intermediate division

