**What will be taught in this course?**

**Part One:**

● Introduction to Ableton Live 11 Intro, getting familiar with its UI and navigating menus and executing functions.

**Part Two:**

Now that we understand the UI and navigate through the menus, we will focus on:

● Understanding timing

● Beats per minute (BPM/Tempo)

● Song structure

● Bars and other forms of measurements according to music

In this section, we will discuss the use of fractions and decimals in order to mathematically create representations of time. Math plays an important role in understanding these concepts. Understanding this we can then move on to the third section of this course.

**Part Three:**

Understanding time and our “time grid” we can now jump into the programming of instruments visually represented as Midi data. In part three we will learn the basics for creating a dynamic 8 bar loop.

● Drum programming using decimals and counting time.

● Groove pools, swing, and syncopation

● Bass line programming using time and its relationship to the drums as a foundation of creating what we call “groove”

● Grouping channels

● Scales, keys, and octaves in order to create chords, melodies, arpeggiators, and other attractive sounds.

At the end of the third section, we will have created an 8-bar loop which can be used as a base to form a well-structured and thought-out song.

**Part Four:**

Now that we have learned the basics, in this final course, we will create one whole song from start to finish using the 8 bars created in the last course. Song structure, using impacts and SFX, learning a bit of synthesis, and effects racks will be taught in this section.

● Song structure and its use across genres.

● Foreshadowing dynamic changes with the use of risers, downers, swirls, and impact percussions, and SFX

● Simple synthesis and the use of modulated parameters on audio effects

● Sampling and resampling audio manipulation techniques

● Audio effects and audio effects racks

At the end of the fourth section, we will have created and completed one 4-minute song.

I would like to mention that the possibilities to learn do not end here.

A fifth section could be implemented that is rooted in science and math used in a much more advanced field of production known as Synthesis/Sound Design, Mixing, and Mastering Engineering. These areas are heavily based on math and sciences, much more physics and math related to frequencies. Ratios, fractions, and decimals are used in this area in order to create well-balanced sounds and mixes.

Students that take this course will learn advanced techniques such as

● Sound Design/Synthesis which includes an understanding of waveforms and envelopes such as Sawtooth, Triangles, Sine, and square waves.

● The frequency spectrum and its correlation to sound as a visual representation

● Mixing and mixing techniques that use EQs, filters, saturators, compressors, AMPs, limiters, and a wide variety of other audio effects in order to clean, boost or balance sounds in order to arrange decibel levels accordingly.

Learning how to properly mix has been the most fun I have ever had since starting with music. There is a unique way of looking at the situation that creates a problem-solution within the individual. Taking on this mindset definitely demands some creativity, but mostly focuses on the nitty gritty of what frequencies are clashing.