MUSIC TECHNOLOGY
Grades 11, 12

Unit of Credit: One Semester or One Year (Elective)

Prerequisite: Two years of music training or consent of the instructor

Course Overview:
Students will compose, arrange and develop music theory skills and aesthetics through the use of computer based music technology. The class will enable students to study the elements of music for their own edification or as preparation for those students who will be college-bound music majors. Students will be assessed through exercises, audio projects, oral and written assignments and exams, reports and participation. The course covers sampling, sound design, and sequencing basics, and guides you from the fundamentals of mixing and mastering to more advanced problem solving techniques that will improve your overall productions.

Units of Study:
- Instrumental pedagogy
- Aesthetic values
- Cultural awareness
- Jazz history
- Musical literacy
- Musical production, engineering, and mastering
- Presentation

Vocabulary:
DAW (Digital Audio Interface), Mixing Board, Sequencing, Loop, Automation, Electronic Music, Applications, BPM (beats per minute), Buffer Memory, Compression, Format, Frequency, MIDI, Gain, Hertz, Mono, Sample, Sampling Rate/Frequency, Signal, Sine Wave, Solo Button, Velocity, Volume, Equalization.

CREATING
Anchor Standard 1: Generate and conceptualize artistic ideas and work.
- Generate musical ideas for various purposes and contexts.
- **Enduring Understanding:** The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- **Essential Questions:** How do musicians generate creative ideas?

MU:Cr1.1.T.Ia Generate melodic, rhythmic, and harmonic ideas for compositions or improvisations using digital tools.
  - I can compose using multiple pattern sequencers within a DAW.
  - I can utilize and manipulate simple and advanced samplers.

- I can demonstrate unity and variety, tension and release, and balance in my composition.
- I can use texture, dynamics, rhythm, and other musical elements to depict a soundscape.
- I can develop my own instrument patches.

Anchor Standard 2: Organize and develop artistic ideas and work.

- **Enduring Understanding:** Musicians' creative choices are influenced by their expertise, context and expressive intent.
- **Essential Question:** How do musicians make creative decisions?

MU:Cr2.1.T.Ia Select melodic, rhythmic, and harmonic ideas to develop into a larger work using digital tools and resources.

- I can apply real-time grooves to change the "feel" of digitally composed music.
- I can know how to make and use a catchy hook using the available instruments and tones within the DAW and samples.
- I can give deliberate structure to my composition project.
- I can use and describe the musical elements used in my melody (dynamics, articulation, tempi, etc.).

Anchor Standard 3: Refine and complete artistic work.

- **Enduring Understanding:** Musicians evaluate and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.
- **Essential Question:** How do musicians improve the quality of their creative work?

MU:Cr3.1.T.Ia Drawing on feedback from teachers and peers, develop and implement strategies to improve and refine the technical and expressive aspects of draft compositions and improvisations.

- I can understand a musical timeline.
- I can effectively use a master track to refine the project.
- I can master advanced cut and paste operations.
- I can elicit specific moods within music.
- I can identify specific music production techniques.

- **Enduring Understanding:** Musicians' presentation of creative work is the culmination of a process of creation and communication.
- **Enduring Question:** When is creative work ready to share?

MU:Cr3.2.T.Ia Share compositions or improvisations that demonstrate a proficient level of musical and technological craftsmanship as well as the use of digital tools and resources in developing and organizing musical ideas.

- I can export project to usable, transferable audio formats.
- I can mix and master a final project.

PERFORMING

Anchor Standard 4: Select, analyze, and interpret artistic work for presentation.

- Select varied musical works to present based on interest, knowledge, technical skill, and context.
- **Enduring Understanding:** Performers' interest in and knowledge of musical work(s), understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- **Essential Question:** How do performers select repertoire?

MU:PR4.1.T.Ia Develop and explain the criteria used for selecting a varied repertoire of music based on interest, music reading skills, and an understanding of the performer's technical and technological skill.

- I can explore genres other than electronic and dance.
- I can create a remix from other genres and morph it into another style.
- I can identify and explain compositional techniques used to provide unity and variety, tension and release in musical works.

- **Enduring Understanding:** Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.
- **Essential Question:** How does understanding the structure and context of musical works inform performance?

MU:PR4.2.T.Ia Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.

- I can identify various opportunities to perform and hear music in the local community and beyond.
- I can identify and discuss the role and development of technology in music, past and present.
- I can describe the stylistic features of a musical selection that define its aesthetic tradition and its historical or cultural context.

- **Enduring Understanding:** Performers make interpretive decisions based on their understanding of context and expressive intent.
- **Essential Question:** How do performers interpret musical works?

MU:PR4.3.T.Ia Demonstrate how understanding the context, expressive challenges, and use of digital tools in a varied repertoire of music influence prepared or improvised performances.

- I can describe technological advances as they affect performing, creating, and listening to music.
- I can discuss the available opportunities and the necessary qualities for pursuing a career in music technology.
- I can identify and discuss the role and development of technology in music, past and present.
- I can describe the stylistic features of a musical selection that define its aesthetic tradition and its historical or cultural context.

Anchor Standard 5: Develop and refine artistic techniques and work for presentation.

- **Enduring Understanding:** To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.
- **Essential Question:** How do musicians improve the quality of their performance?

MU:PR5.1.T.Ia Identify and implement rehearsal strategies to improve the technical and expressive aspects of prepared and improvised performances in a varied repertoire of music.

- I can make independent judgements concerning the functions of harmony, timbre, texture, form, and any other appropriate characteristics to evaluate musical compositions, live, recorded, or sequenced, by using a rubric.
- I can evaluate a composition or arrangement by comparing it, through the use of a rubric, to similar or exemplary models.

Anchor Standard 6: Convey meaning through the presentation of artistic work.

- Perform expressively, with appropriate interpretation and technical accuracy, and in a manner appropriate to the audience and context.
- **Enduring Understanding:** Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- **Essential Question:** When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?

MU:PR6.1.T.Ia Using digital tools, demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music.

- I can improvise over familiar melodies using Reason or accompanying software.
- I can improvise/compose over familiar melodies using sequencing software.
- I can improvise/compose rhythmic and melodic variations on given pentatonic melodies and melodies in major and minor keys to aid in the compositional process using various notation and/or sequencing software.
- I can improvise/compose harmonic or contrapuntal material to support familiar melodies to aid in the compositional process using various notation and/or sequencing software.

MU:PR6.1.T.Ib Demonstrate an understanding of the context of music through prepared and improvised performances.

- I can identify various opportunities to perform and hear music in the local community and beyond.

RESPONDING

Anchor Standard 7: Perceive and analyze artistic work.

- **Enduring Understanding:** Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.

- **Essential Question:** How do individuals choose music to experience?

MU:Re7.1.T.Ia Cite reasons for choosing music based on the use of the elements of music, digital and electronic aspects, and connections to interest or purpose.

- I can understand why the music being studied has been chosen as it relates to my own personal growth.
- I can understand why the music being studied has been chosen as it relates to a program theme, concept, or set of techniques.
- I can provide an appropriate program/album order from the music performed.

- **Enduring Understanding:** Response to music is informed by analyzing context (social, cultural, and historical) and how creators and performers manipulate the elements of music.
- **Essential Question:** How do individuals choose music to experience?

MU:Re7.2.T.Ia Explain how knowledge of the structure (repetition, similarities, contrasts), technological aspects, and purpose of the music informs the response.

- If a piece is programmatic in nature, I know the story behind the composition based on my understanding of the music.
- I am aware of who the composer/producer is and what her/his intention within the composition.
- I can create my own story-line for a track or album.

Anchor Standard 8: Interpret intent and meaning in artistic work.

- **Enduring Understanding:** Through their use of elements and structures of music, creators and performers provide clues to their expressive intent.
- **Essential Question:** How do we discern the musical creators' and performers' expressive intent?

MU:Re8.1.T.Ia Explain and support an interpretation of the expressive intent of musical selections based on treatment of the elements of music, digital and electronic features and purpose.

- I can make independent judgments concerning the functions of harmony, timbre, texture, form, and any other appropriate characteristics to evaluate musical compositions, live, recorded, or sequenced, by using a rubric.
- I can develop, assess, and revise rubrics to evaluate musical performances, live, recorded, or sequenced.

Anchor Standard 9: Apply criteria to evaluate artistic work.

- **Enduring Understanding:** The personal evaluation of musical work(s) and performance(s) is informed by analysis, interpretation, and established criteria.
- **Essential Question:** How do we judge the quality of musical work(s) and performance(s)?

MU:Re9.1.T.Ia Evaluate music using criteria based on analysis, interpretation, digital and

electronic features, and personal interests.

- I can evaluate a composition or arrangement by comparing it, through the use of a rubric, to similar or exemplary models.
- I can objectively evaluate a given musical work in terms of its technical, artistic, and aesthetic qualities.

CONNECTING

Anchor Standard 10: Synthesize and relate knowledge and personal experiences to make art.

- **Enduring Understanding:** Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.
- **Essential Question:** How do musicians make meaningful connections to creating, performing, and responding?

MU:Cn10.0.T.Ia Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing and responding to music.

- I can identify and compare styles of music from Western and nonwestern cultures.
- I can describe factors that influence relationships between a producer's music and his or her environment, commerce, and era.
- I can describe the ways music technology is used in various cultures and demographic groupings of the United States and other countries.

Anchor Standard 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.

- Relate musical ideas and work to varied context and daily life to deepen understanding.
- **Enduring Understanding:** Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
- **Essential Question:** How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?

MU:Cn11.0.T.Ia Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

- I can emulate music from a variety of historical periods, styles, and cultures and will relate its characteristics with elements of dance, theatre, visual arts, and other disciplines.
- I can compose original music based on stimuli from dance, theatre, visual arts, and media.
- The student will compare and contrast the roles of creators, performers, and producers in music to roles in the other arts.