

**Introduction to Music Technology  
Grades: 9-12  
Fine & Performing Arts  
Curriculum Guide**

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**LINDEN PUBLIC SCHOOLS  
LINDEN, NEW JERSEY**

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**The Linden Board of Education adopted the Curriculum Guide on:**

**August 25, 2022**

**Education Item 10**

**Date**

**Agenda Item**

**Rationale**

**Be it resolved, that all curricula within the following content areas be readopted for use in the Linden Public Schools for the 2021-2022 school year. All curricula are aligned to the New Jersey Student Learning Standards.**

**Public Notice of Non-Discrimination**

If any student or staff member feels that they have experienced discrimination on the basis of race, color, creed, religion, gender, ancestry, national origin, social or economic status, sexual orientation or disability, contact:

**Affirmative Action Officer**

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### **Linden Public Schools Vision**

The Linden Public School District is committed to developing respect for diversity, excellence in education, and a commitment to service, in order to promote global citizenship and ensure personal success for all students

### **Linden Public Schools Mission**

The mission of the Linden Public School District is to promote distinction through the infinite resource that is Linden's diversity, combined with our profound commitment to instructional excellence, so that each and every student achieves their maximum potential in an engaging, inspiring, and challenging learning environment.

## **Fine & Performing Arts Department Philosophy**

We in the Linden Public Schools believe that the basic purpose of fine and performing arts education K to12 is to develop and nurture the students' skills as performers, creators, organizers, observers and evaluators. Our program is the study of the wide-range of disciplines that contain band, choir, dance, drama, musical theatre, orchestra, and visual art as well as, appropriate content from the humanities and the sciences.

We believe and accept the idea that the study of the fine and performing arts:

- Cultivates the whole person, engaging the mind, body and spirit.
- Builds many kinds of literacy while developing intuition, reasoning, dexterity and imagination.
- Invites multiple ways of knowing which actively engage the brain learning.
- Fosters unique, vital forms of communication, bringing excitement and exhilaration to the learning process.
- Embraces ambiguity-encouraging students to wonder and question.
- Develops both individual initiative and collective responsibility.
- Connects cultures and generations, past and present.
- Integrates the arts into other subjects as well as incorporating mathematics, language arts, history, and science into the fine & performing arts curriculum.
- Has commonalities but must also be respected as a distinct discipline.

We believe the primary goal of our fine & performing arts program will allow young people to nurture a positive self-image by developing self-awareness and self-discipline. We believe the teaching of art & music in the Linden Public Schools encourages students to be fluent in thought, flexible in acceptance, sensitive to feeling, creative in experimentation, aware of moral attitudes, inventive in their work, imaginative in creation, poised in presentation, cooperative in social interactions and appreciative of the work of others.

### **Fine & Performing Arts Department Goals**

It is the goal of the music department to give the students of Linden Public Schools an opportunity to investigate the diverse areas in music open to them and let them choose and explore those to their liking. It is our desire that the students will gain a background in the basics of music. They will develop an appreciation of music and enrich the quality of their lives now and in the future. This revised K-8 music curriculum includes the six elements of music: rhythm, melody, harmony, tone color, form and expression. Originality, creativity and self-expression are stressed throughout each lesson taught. A scope and sequence is evident in this curriculum, as well as an understanding of the student's growth and development in music.

Additional goals will:

1. Provide the opportunity for students to develop skills to express feelings and ideas through music production.
2. Present the music program as a creative challenge to all students providing for skill development in the area of critical thinking and problem solving.
3. Give students an opportunity to explore music in the context of personal interests and aptitude including the development of communication skills both verbal and written.
4. Encourage students to achieve an appreciation of music, which will assist them in understanding its use and value historically and culturally.
5. Reinforce the interconnectedness between the study of art, music, mathematics, history, creative writing and literature.
6. Develop student awareness of the relationship of music with important aspects of daily living including its necessary functions for various career pursuits.
7. Provide the opportunity for visibility of the school music program via students' concerts as both a reflection of student achievement and a vehicle to communicate the value of music education to the community.

## I. Course Description

This course is designed for students who have an interest in writing and recording music. Students will have the opportunity to work at their own ability level through hands on application using electric keyboards and computers. Basic music theory will also be introduced to help students have a better understanding of composition. This is a half year course.

## II. Standards and NJDOE Mandates Guiding Instruction

### A. New Jersey Student Learning Standards

<https://www.nj.gov/education/cccs/2020/2020%20NJSLS-VPA.pdf>

### B. 21<sup>st</sup> Century Life and Career Standards

<https://www.nj.gov/education/aps/cccs/career/>

### C. Amistad Commission Mandates...

(specific topics are identified where appropriate within each unit)

- the teaching of the African slave trade, slavery in America, the vestiges of slavery in this country and the contributions of African-Americans to our society
- evidence is found in all grade-bands in the district's K to 12 social studies curricula, [e.g., units about slavery, civil rights, Contemporary United States History (Era 14)]
- Resources available at:

<http://www.njamistadcurriculum.net>

### D. Holocaust Commission Mandates...

(specific topics are identified where appropriate within each unit)

- the curricula address issues of bias, prejudice and bigotry, including bullying through the teaching of the Holocaust and genocide for all children in grades K to 12
- the implementation of this mandate will be found in the district's K to 12 social studies curricula, specifically in standard 6.3 (K to 4 and 5 to 8) and during the appropriate time periods in grades 9-12 (standard 6.1, Era 11 and 6.2, Era 4)
- Resources available at:

<https://www.nj.gov/education/holocaust/>

### E. LGBTQ Mandate...

- The teaching of the political, economic, and social contributions of persons with disabilities, lesbian, gay, bisexual, and transgender people.

### F. Diversity, Equity, and Inclusion Mandate.....

- The teaching of diversity, equity, and inclusion will be incorporated in appropriate places throughout the curriculum.

## III. General Interdisciplinary Connections

In high school music classes, students use visual aids or read lyrics which associates to language arts classes. Students use math through counting, adding, and subdividing beats as they learn to ready rhythms. Additionally, classes relate to social studies through the connection of music to various regions of the world and time periods/genres from which they derive. Finally, music classes connect to science through the explanation of how waves create sound.

#### IV. Pacing Guide

First Marking Period	UNIT 1: HISTORY OF ELECTRONIC INSTRUMENTS - 2 WEEKS UNIT 2: KEYBOARD BASICS AND MUSIC THEORY – 3 WEEKS UNIT 3: SONGWRITING- 5 WEEKS
Second Marking Period	UNIT 4: MULTI TRACK RECORDING BASICS- 4 WEEKS UNIT 5: FILM SCORING APPLICATIONS OF MUSIC TECHNOLOGY- 3 WEEKS UNIT 6: MASH-UPS AND PODCASTING- 2 WEEKS UNIT 7: CAREERS IN MUSIC TECHNOLOGY- 1 WEEK

#### V. Vertical Integration – Course Mapping

The mapping of the Fine & Performing Arts program within Linden Public Schools consists of the following:

Skill	Year 1/ Intro
Music Technology Historical Facts	Proficient
Music Theory	Proficient
Musical Sequencing	Proficient
Classical Musical Form	Proficient
Songwriting Form	Proficient
Midi Set-up	Proficient
Musical Notation	Proficient
Musical Rhythms	Proficient
Sound Equalization	Proficient
Use of Compressors	Proficient
Note Velocity	Proficient
Musical Effects	Proficient

Automations	Proficient
Recording	Proficient
Track Mastering	Proficient
Student Self Evaluation	Proficient

## VI. Accommodations, Modifications, and Teacher Strategies (specific recommendations are made in each unit)

Instructional Strategies	Gifted and Talent Accommodations and Modifications	Special Education and At-Risk Accommodations and Modifications	English Language Learners Accommodations and Modifications
<ul style="list-style-type: none"> <li>Teacher Presentation</li> <li>Student Presentation</li> <li>Class Discussion</li> <li>Socratic Discussion</li> <li>Reading for Meaning</li> <li>Inquiry Design Model</li> <li>Interactive Lecture</li> <li>Interactive Notetaking</li> <li>Compare and Contrast</li> <li>Research Based</li> <li>Problem Based</li> <li>Project Based</li> </ul> <p><b>504 Plans</b></p> <p>Students can qualify for 504 plans if they have physical or mental impairments that affect or limit any of their abilities to:</p> <ul style="list-style-type: none"> <li>walk, breathe, eat, or sleep</li> <li>communicate, see, hear, or speak</li> <li>read, concentrate, think, or learn</li> <li>stand, bend, lift, or work</li> </ul> <p>Examples of accommodations in 504 plans include:</p> <ul style="list-style-type: none"> <li>preferential seating</li> <li>extended time on tests and assignments</li> <li>reduced homework or classwork</li> <li>verbal, visual, or technology aids</li> <li>modified textbooks or audio-video materials</li> <li>behavior management support</li> <li>adjusted class schedules or grading</li> <li>verbal testing</li> <li>excused lateness, absence, or missed classwork</li> <li>pre-approved nurse's office visits and accompaniment to visits</li> <li>occupational or physical therapy</li> </ul>	<ul style="list-style-type: none"> <li>Allow for further independent research on topics of interest related to the unit of study</li> <li>Advanced leveled readers and sources</li> <li>Increase the level of complexity</li> <li>Decrease scaffolding</li> <li>Variety of finished products</li> <li>Allow for greater independence</li> <li>Learning stations, interest groups</li> <li>Varied texts and supplementary materials</li> <li>Use of technology</li> <li>Flexibility in assignments</li> <li>Varied questioning strategies</li> <li>Encourage research</li> <li>Strategy and flexible groups based on formative assessment or student choice</li> <li>Acceleration within a unit of study</li> <li>Exposure to more advanced or complex concepts, abstractions, and materials</li> <li>Encourage students to move through content areas at their own pace</li> <li>After mastery of a unit, provide students with more advanced learning activities, not more of the same activity</li> <li>Present information using a thematic, broad-based, and integrative content, rather than just single-subject areas</li> </ul>	<ul style="list-style-type: none"> <li>Focus on concept not details</li> <li>More visual prompts</li> <li>Leveled readers and teacher annotated sources</li> <li>Timelines and graphic organizers</li> <li>Remove unnecessary material, words, etc., that can distract from the content</li> <li>Use of off-grade level materials</li> <li>Provide appropriate scaffolding</li> <li>Limit the number of steps required for completion</li> <li>Time allowed</li> <li>Level of independence required</li> <li>Tiered centers, assignments, lessons, or products</li> <li>Provide appropriate leveled reading materials</li> <li>Deliver the content in "chunks"</li> <li>Varied texts and supplementary materials</li> <li>Use technology, if available and appropriate</li> <li>Varied homework and products</li> <li>Varied questioning strategies</li> <li>Provide background knowledge</li> <li>Define key vocabulary, multiple-meaning words, and figurative language.</li> <li>Use audio and visual supports, if available and appropriate</li> <li>Provide multiple learning opportunities to reinforce key concepts and vocabulary</li> <li>Meet with small groups to reteach idea/skill</li> <li>Provide cross-content application of concepts</li> <li>Ability to work at their own pace</li> <li>Present ideas using auditory, visual, kinesthetic, &amp; tactile means</li> <li>Provide graphic organizers and/or highlighted materials</li> <li>Strategy and flexible groups based on formative assessment</li> <li>Differentiated checklists and rubrics, if available and appropriate</li> </ul>	<ul style="list-style-type: none"> <li>Focus on concept not details</li> <li>More visual prompts</li> <li>Leveled readers and teacher annotated sources</li> <li>Guided notes with highlighted words and concepts</li> <li>Use of Merriam-Webster's ELL dictionary</li> <li>Timelines and graphic organizers</li> <li>Remove unnecessary material, words, etc., that can distract from the content</li> <li>Use of off-grade level materials</li> <li>Provide appropriate scaffolding</li> <li>Limit the number of steps required for completion</li> <li>Time allowed</li> <li>Level of independence required</li> <li>Tiered centers, assignments, lessons, or products</li> <li>Provide appropriate leveled reading materials</li> <li>Deliver the content in "chunks"</li> <li>Varied texts and supplementary materials</li> <li>Use technology, if available and appropriate</li> <li>Varied homework and products</li> <li>Varied questioning strategies</li> <li>Provide background knowledge</li> <li>Define key vocabulary, multiple-meaning words, and figurative language.</li> <li>Use audio and visual supports, if available and appropriate</li> <li>Provide multiple learning opportunities to reinforce key concepts and vocabulary</li> <li>Meet with small groups to reteach idea/skill</li> <li>Provide cross-content application of concepts</li> <li>Ability to work at their own pace</li> <li>Present ideas using auditory, visual, kinesthetic, &amp; 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## VII. Assessments

- Tests
- Quizzes
- Homework
- Projects
- Class Participation
- Performance Evaluation
- Attendance
- Final Exam
- Class Observation

## VIII. Resources

- GarageBand
- Audacity
- iMovie
- “Developing a Course in Electronic Music and Recording Sciences for the Comprehensive High School” - James A. Wynne; Second Edition, 1995
- Youtube.com tutorials on Garageband.
- Apple Teacher Website.
- “Studio Recording for Musicians” – Fred Miller Amsco Publications – 1981
- “Songwriting Made Easy” – Russell Robinson Alfred Publications
- “Sound Advice” – Wayne Wadhams Schirmer Books – 1990

## Unit #1: The History of Electronic Music (1 Week)

**Overview:** A history of synthesized sound; This unit will take about a week to complete if taught in succession. Or it can be an ongoing unit in which content is introduced periodically when relevant related concepts are being introduced.

### Essential Questions:

- What is the earliest example of electronic music?
- Why Look for new ways of musicality, albeit we have so many acoustical musical instruments?
- What is a traditional way to organize musical thoughts?
- What is a modern way to describe the organization of musical thoughts?
- Who are some of the pioneers of musical synthesis, and were they successful in changing the musical culture of their time?

### Enduring Understanding:

- The study of music can be stated simply as the study of organized sound.
- Historically, man has always searched for new and interesting methods of musical expression.
- Even though new instruments were invented prior to the 20<sup>th</sup> century, the advancements in the Radio and Digital ages have dramatically increased these innovations.
- As is often the case, many of the pioneers of synthetic sound were ahead of their time, and their inventions did little more than inspire those who would follow years later.

### Students will be able to:

- The pioneers of synthetic sound.
- The difference between traditional and non-traditional musical language.
- How the recording “Switched –On Bach” changed the field of electronic/synthetic music, opening up new possibilities and parameters in the recording industry.

### Students will know:

- Describe the invention of a particular innovator or inventor.
- Describe the limitations of each invention, as well as the impact this invention would have on musical culture.
- Understand the recording process of a multi-track recording – as it applies to Switched-On Bach.

### Suggested Experiences:

- <https://www.rollingstone.com/music/music-lists/24-inventions-that-changed-music-16471/microphone-1877-222358/> .  
Read the 24 inventions that changed music.
- Watch youtube videos evolution of Music Technology part 1 <https://youtu.be/-Wpb4N00ruE> and part 2 <https://youtu.be/oHqCP7BQI3g> .
- Projects.

### New Jersey Department of Education - State Instructional Mandates:

Topics that address the LGBTQ Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process.

Topics that address the Diversity, Equity, and Inclusion Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process

## Unit #2: Keyboard basics and Music Theory

**Overview:** Students should have a basic, functional understanding of the piano keyboard and how basic music theory applies to it. Chord structure, pitch locations, melody and harmony are all relevant content. Students will use the contents of this unit throughout their experience in the recording studio.

### Essential Questions:

- Why is the keyboard the most used device in music technology applications?
- Is a professional pianist better at manipulating synthesized sound than someone who has a basic, functional understanding of the keyboard?
- How has the keyboards use in music technology affected trends in popular music?

### Enduring Understanding:

- Understanding the keyboard is essential to the recording process.
- The keyboard represents the 12 tone note system in a clear and functional layout.
- Music Technology relies heavily on the simplicity and accessibility of the keyboard.

### Students will be able to:

- Basic knowledge of Scales and Key Signatures.
- Create chords in a basic and inverted structures.
- Create simple melodies and motifs.

### Students will know:

- How to read the treble clef
- How to read the Bass Clef
- How to read the Grand Staff
- How to construct simple major scales
- How to construct Major, Minor, Augmented, Diminished and Seventh Chords

### Suggested Experiences:

- **Musical Sequencing Project:**
  - Each sequence needs to be 4 measures long.
    - Create the first measure make sure you start the sequence on any one of the C notes shown on the keyboard in piano roll.
    - After creating the first measure copy (command-c) and paste (command-v) three times.
    - For Ascending- move each of the pasted measures in an upward motion, by selecting each note in the measure and dragging them upward.
    - For Descending-move each of the pasted measures in an downward motion by selecting each note in the measure and dragging them downward.
  - You have created by now an Ascending or Descending Real Sequence
  - Copy and paste the whole Real sequence into the Tonal sequence spot in the project.
    - 
    - Go into the editor section by pressing E on the keyboard or double clicking into the work area.
    - Click on Score in the editor it will now show that alterations to the notes that are sharps and flats need to be made to natural.
  - Remove all the notes that are now on the black keys to the white keys. This will keep the work in the key of C which has no Sharps or Flats in the key signature. (black keys) This is now your tonal sequence.

- To make a Mixed sequence repeat the second process and remove the Sharps and Flats in just one measure.
- You will now have some measure which are tonal and others that are real, which makes it a mixed sequence.
- Create both Types of Sequences Descending and Ascending as Single line (Melodies) and Multiple lines (Chordal) sequences with created drumbeats.

### **A-B-A Project:**

- Using Loops or creating melody you are to create a project that has 2 contrasting sections (A form and B form)
- Each section needs at least 3 layers.
- 8 measures for Form A (the work should touch measure 9)
- 8 measures for Form B (to touch measure 17).
- The addition to a 4-measure bridge section which is a contrasting section from both the A section and the B section. This section should be measures 17 through 20
- Copy the A section at the end of the bridge section. Comm-C and Comm- V
- Use of volume, Echo, reverb automation. (By pressing A on your keyboard.)
- Garageband
- Imovie
- Audacity

## Unit #3: Songwriting

**Overview:** A truly independent musician in the recording studio understands the basic principles of song arranging and composition.

### **Essential Questions:**

- What special training does one need to have in order to write music a song?
- What are the parts of a song?
- How is a song linked to a poetic form?
- What purpose can a song serve?
- What is a chorus and why is it so vital in the construction of a song?

### **Enduring Understanding:**

- The role of the songwriter has changed over the past five decades due to home recording studios and DAWs.
- Gone are the days when recording artists recorded exclusively songs either written for them or chosen to record.
- We live in the age of the “Singer-Songwriter,” a person who writes, records and produces their own material.

### **Students will be able to:**

- Demonstrate how his/her time at the Workstation more efficiently, and with respect to the other student recording engineers.
- Demonstrate ability to work independently or in tandem with a partner to create a new recording.
- Create and Record apart in time with a click track in order to ensure that the tracks are synchronized.
- Demonstrate the use of the editing tools provided in the program in order to finish the session.
- Discern what is a good recording. Further discern what problems were encountered that led to any negative results.

### **Students will know:**

- The parts of a song and how they function on their own and together.
- Famous songwriters and the songs they have written.
- Songwriters may write in traditional and non-traditional musical language.

### **Suggested Experiences:**

- **A-B-A Project**
- Using Loops or creating melody you are to create a project that has 2 contrasting sections ( A form and B form)
- Each section needs at least 3 layers.
- 8 measures for Form A ( the work should touch measure 9)
- 8 measures for Form B (to touch measure 17).
- The addition to a 4 measure bridge section which is a contrasting section from both the A section and the B section. This section should be measures 17 through 20
- Copy the A section at the end of the bridge section. Comm-C and Comm- V
- Use of volume, Echo, reverb automation. (By pressing A on you keyboard)
- Musical Form based projects.
- Garageband
- Imovie
- Audacity

**New Jersey Department of Education - State Instructional Mandates:**

Topics that address the LGBTQ Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process.

Topics that address the Diversity, Equity, and Inclusion Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process

## Unit #4: Multi Track Recording Basics

**Overview:** Students should have a basic knowledge DAWS (Digital Audio Work Stations)

### **Essential Questions:**

- How can you manipulate tracks in the DAW?
- What constitutes a good mix?
- What constitutes a good master?
- What constitutes a properly recorded audio file?
- What constitutes a complete session?

### **Enduring Understanding:**

- Successful recording sessions require planning and preparation.
- Digital recording sessions require knowledge of the physical setup of the workstation so that devices can communicate.
- DAWs enable musicians to manipulate recorded and synthesized audio.
- Recording, sequencing, mixing and mastering are executed in the DAW.

### **Students will be able to:**

- Demonstrate how his/her time at the Workstation more efficiently, and with respect to the other student recording engineers.
- Demonstrate ability to work independently or in tandem with a partner to create a new recording.
- Create and Record apart in time with a click track in order to ensure that the tracks are synchronized.
- Demonstrate the use of the editing tools provided in the program in order to finish the session.
- Discern what is a good recording. Further discern what problems were encountered that led to any negative results.

### **Students will know:**

- Storyboard a session.
- Create and set sessions in the DAW.
- How to insert a click track and autotune into a recording.
- How to edit and master the recording.
- How to analyze and criticize their own works as well as giving advice to fellow classmates.

### **Suggested Experiences:**

- Use of Automations
- How to Master a track.
- How to set up Microphones
- Microphone Placement.
- Types of Microphones- Condenser, Cardioid etc.
- Garageband
- Imovie
- Audacity

## Unit #5: Film Scoring applications of Music Technology

**Overview:** Music Technology has a variety of applications beyond popular recorded music. Each area has its own unique set of needs and procedures.

### Essential Questions:

- What is the process for composing a piece of music to be used in a live action film?
- What is a sync point?
- How is a live action film score recorded? How does it differ from a recording session in a recording studio?
- How is the process of composing for an animated feature film different from that of live film?
- What are sound effects?
- What is foley?

### Enduring Understanding:

- Modern feature length movies and animated films employ composers who utilize music technology in the recording studio
- Music Technology has a variety of applications beyond popular recorded music. Each area has its own unique set of needs and procedures.
- Animation composers supply all their music prior to the animation process: the process is reverse that of live film.

### Students will be able to:

- Accurately listen for sync points in live action film.
- Identify the usage of a 'leit motif.'
- Identify the use of 'stock music' or 'standards' in a film score.
- Discern and discuss the different types of musical themes found in a movie score?

### Students will know:

- The language and terminology associated with film and animation scoring.
- How to perceive the use of 'leit motif' – an operatic device created by Richard Wagner for his operas – which links a musical theme to a particular character or idea.
- How to tell the difference between music that is stock music, or a standard piece, versus that which has been originally composed for the film.
- How to listen to hear if the music is hidden in plain sight within the movie, or is it not transparent?

### Suggested Experiences:

- Watch movie [Score: A Film Music Documentary](#)
- Listen to podcasts on Film Score called [Art of the Score](#).
- Watch famous scenes in movies and analyze how the music works.
- Overdub Music and Sound effects in silent movies.

### New Jersey Department of Education - State Instructional Mandates:

Topics that address the LGBTQ Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process.

Topics that address the Diversity, Equity, and Inclusion Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process

## Unit #6: Mash-ups and Podcasts

**Overview:** Students will produce their own Mash-up and Podcast, which the teacher will listen to for quality and workmanship

### **Essential Questions:**

- How can a DAW be used to import existing sound sources to create an original sounding “sound-scape”.
- What qualities does a Mash-up have that make it sound like a new and cohesive whole?
- What makes a Podcast enjoyable or interesting to listen to?
- What are reasons that Podcasting and listening to Podcasts has become such a popular activity?

### **Enduring Understanding:**

- To use a Digital Audio Workstation (DAW), such as Pro Tools Express to create new original projects.
- Students will learn that they can make original creations on the computer by using pre-recorded music.
- Create a Mash-up: a song or composition created by blending two or more pre-recorded songs.
- Create a Podcast.

### **Students will be able to:**

- How to navigate and utilize a Digital Audio Workstation.
- How to select cohesive song excerpts for use in a Mash-up.
- How to import and edit music files to create a Mash-up.
- How to select a Podcast topic.
- How to select, import and edit music files for use in a Podcast
- How to record and edit a “voice over” style narration for the Podcast.

### **Students will know:**

- That readily available and relatively easy to use programs can be used to create new music projects.
- That existing sound sources can be imported and used as “sound materials” for projects. Recording new music is not the only option.
- What are the traits of a quality Mash-up?
- What are the traits of a quality Podcast

### **Suggested Experiences:**

- To create a Mash-up of two closely related songs.
- Create a podcast of your choice.
- Listen to professional mash-up artist ie. DJ Earworm and The Hood Internet
- Listen to professional educational podcasts.
- Garageband
- Imovie
- Audacity

## Unit #7: Careers in Music Technology

**Overview:** The process of recording, mixing and mastering music involves many people with unique, specific skill sets.

### Essential Questions:

- Besides performance and teaching, what career paths are available to musicians, as well as to those who love the art but do not necessarily possess the skill level to perform?
- Which career paths require a B.A. or similar degree?
- Which career paths require very little post high-school training, if any?
- What insights have you gained from listening to students attending college at this time? Were their descriptions of college life appealing to you? Would you choose that particular college for your own education?

### Enduring Understanding:

- Although it is not always a requirement for employment or a statement of talent, many musicians increase their study of the craft by attending some form of school after high school.
- The process of recording, mixing and mastering music involves many people with unique, specific skill sets.
- Much can be gained from hearing first-hand experiences from those just slightly removed from high school.
- There are many careers in music technology that require human subjectivity and expression.

### Students will be able to:

- Create a temporary short list of potential schools that fit their academic and social needs.
- Discuss if a musician must have a college degree in order to work, as well as which musical professions.
- Discuss and discern material about the post high school educational experience.

### Students will know:

- The job market for each of the career paths in music.
- Students often change their minds regarding career path – but a commitment to music must be made early in life.
- The career paths that require further study and/or degrees.
- Students will know that there are many other career choices in music, and that they are not limited to performance and teaching.

### Suggested Experiences:

- Projects.
- Discussions.
- Videos.

### New Jersey Department of Education - State Instructional Mandates:

#### Topics that address the LGBTQ Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process.

#### Topics that address the Diversity, Equity, and Inclusion Mandate...

Students will learn about composers and performers from diverse backgrounds during the investigative portion of the creative process

# Introduction to Music Technology

Content Area: **Performing Arts**  
Course(s): **Introduction to Music Technology**  
Time Period: **First Marking Period**  
Length: **Semester**  
Status: **Published**

## **New Jersey Learning Standards- Music Technology- Proficient**

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MU.9-12.1.3E.12prof.Re7a	Cite reasons for choosing music based on the use of the elements of music, digital and electronic aspects, and connections to interest or purpose.
MU.9-12.1.3E.12prof.Cr3a	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.
MU.9-12.1.3E.12prof.Re8a	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.
MU.9-12.1.3E.12prof.Cr2a	Select melodic, rhythmic and harmonic ideas to develop into a larger work using digital tools and resources.
MU.9-12.1.3B.12prof.Cn10a	Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing, and responding to music.
MU.9-12.1.3E.12prof.Pr4b	Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.
MU.9-12.1.3E.12prof.Pr6a	Using digital tools, demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music.
MU.9-12.1.3E.12prof.Cr3b	Share compositions or improvisations that demonstrate musical and technological craftsmanship as well as the use of digital tools and resources in developing and organizing musical ideas.
MU.9-12.1.3E.12prof.Re9a	Evaluate music using criteria based on analysis, interpretation, digital and electronic features, and personal interests.
MU.9-12.1.3E.12prof.Pr6b	Demonstrate an understanding of the context of music through prepared and improvised performances.
MU.9-12.1.3B.12prof.Cn11a	Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts and daily life.
MU.9-12.1.3E.12prof.Pr4a	Develop and explain the criteria used for selecting varied sound resources based on interest, music reading skills, and an understanding of the performer's musical and technological skill.
MU.9-12.1.3E.12prof.Pr5a	Identify and implement rehearsal strategies to improve the technical and expressive aspects of prepared and improvised performances in a varied repertoire of music.
MU.9-12.1.3E.12prof.Pr4c	Identify the context, expressive challenges, and use of digital tools in a varied repertoire of music influence prepared or improvised performances.
MU.9-12.1.3E.12prof.Cr1a	Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.
MU.9-12.1.3E.12prof.Re7b	Explain how knowledge of the structure (e.g., repetition, similarities, contrasts), technological aspects, and purpose of the music informs the response.

## **Career Readiness, Life Skills Standards**

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WRK.K-12.P.1	Act as a responsible and contributing community members and employee.
WRK.K-12.P.2	Attend to financial well-being.
WRK.K-12.P.3	Consider the environmental, social and economic impacts of decisions.
WRK.K-12.P.4	Demonstrate creativity and innovation.
WRK.K-12.P.5	Utilize critical thinking to make sense of problems and persevere in solving them.
WRK.K-12.P.6	Model integrity, ethical leadership and effective management.
WRK.K-12.P.7	Plan education and career paths aligned to personal goals.
WRK.K-12.P.8	Use technology to enhance productivity increase collaboration and communicate effectively.
WRK.K-12.P.9	Work productively in teams while using cultural/global competence.

## Interdisciplinary Connections

**Interdisciplinary Connections:** In Music Technology classes, students use visual aids or read lyrics which associates to language arts classes. Students use math through counting, adding, subdividing beats, and creating patterns as they learn to create rhythms and loops. Additionally, classes relate to social studies through the connection of music to various regions of the world and time periods/genres from which they derive. Music technology classes connect to science through the explanation of how waves create sound. Finally, classes relate to technology through the use of computers and software to create music.

**21<sup>st</sup> Century Themes:** In addition to mastery of core academic subjects, students must exhibit a range of both functional and critical thinking skills, problem solving, creativity and innovation.

CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
TECH.9.4.12.IML.7	Develop an argument to support a claim regarding a current workplace or societal/ethical issue such as climate change (e.g., NJLSA.W1, 7.1.AL.PRSNT.4).
TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.DC.7	Evaluate the influence of digital communities on the nature, content and responsibilities of careers, and other aspects of society (e.g., 6.1.12.CivicsPD.16.a).
CRP.K-12.CRP11	Use technology to enhance productivity.
TECH.9.4.12.IML.9	Analyze the decisions creators make to reveal explicit and implicit messages within information and media (e.g., 1.5.12acc.C2a, 7.1.IL.IPRET.4).
CRP.K-12.CRP11.1	Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.

TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
TECH.9.4.12.IML.4	Assess and critique the appropriateness and impact of existing data visualizations for an intended audience (e.g., S-ID.B.6b, HS-LS2-4).
LA.K-12.NJSLSA.SL1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
LA.K-12.NJSLSA.SL2	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP10	Plan education and career paths aligned to personal goals.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.
CRP.K-12.CRP6.1	Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.
CRP.K-12.CRP10.1	Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.