TOWNSHIP OF UNION PUBLIC SCHOOLS

Music Applications and Technology

Adopted: July 30, 2024

Music Technology and Applications

Unit 1: Foundations of Music Technology

Grade level: 9-12
Timeframe: 3-4 Weeks

Guiding Questions

How do musicians generate creative ideas?
How do musicians make creative decisions?
How do musicians improve the quality of their creative work?
How do musicians make meaningful connections to creating, performing and responding?
When is creative work ready to share?
How do other arts disciplines, contexts, and daily life inform creating, performing, and responding to music?
How does understanding the structure & context of musical works inform a performance?
How do individuals choose music to experience? How does understanding the structure and context of music inform a response?
How do we judge the quality of musical work(s) and performance(s)?

Standards

Standards (Taught and Assessed)

1.3B.12prof.Cr1a: Describe how sounds and short musical ideas can be used to represent personal experiences, moods, visual images, and/or storylines.
1.3B.12prof.Cr2a: Assemble and organize sounds or short musical ideas to create initial expressions of selected experiences, moods, images or storylines.
1.3B.12prof.Cr2b: Identify and describe the development of sounds or short musical ideas in drafts of music within simple forms (e.g., one part, cyclical, binary).
1.3B.12prof.Cr3a: Identify, describe and apply teacher-provided criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.
1.3B.12prof.Cr3b: Share music through the use of notation, performance or technology, and demonstrate how the elements of music have been employed to realize expressive intent.
1.3B.12prof.Cn10a: Demonstrate how interests, knowledge and skills relate to personal choices and intent when creating, performing, and responding to music.
1.3B.12prof.Cn11a: Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.
1.3E.12prof.Cr1a: Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.
1.3E.12prof.Cr2a: Select melodic, rhythmic and harmonic ideas to develop into a larger work using digital tools and resources.

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.
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.
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.
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.
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.
1.3E.12prof.Re9a: Evaluate music using criteria based on analysis, interpretation, digital and electronic features, and personal interests.

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.3.12.AR.5 Describe the career opportunities and means to achieve those opportunities in each of the Arts, A/V Technology & Communications Career Pathways.
- 9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.
- 9.3.12.AR-AV.1 Describe the history, terminology, occupations and value of audio, video and film technology.
- 9.3.12.AR-AV.2 Demonstrate the use of basic tools and equipment used in audio, video and film production.
- 9.3.12.AR-AV.4 Design an audio, video and/or film production.
- 9.4.12.CI.1: Demonstrate the ability to reflect, analyze and use creative skills and ideas.
- 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.
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Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills

https://www.nj.gov/education/safety/wellness/selearning/docs/SELCompetencies.pdf

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Student Survey - Students will indicate the level of experience they have with music production as well as their areas of interest. - Introductory Activity - Students will demonstrate their prior knowledge of digital audio workstations as well as their ability to apply new skills.	- Small group or paired assignments - Additional time - Pairing oral instruction with visuals - Repeat directions - Alternative assessment - See additional modifications here.

***Lessons in this unit (with the exception of Introduction to DAW) may be adjusted, edited, reordered, or omitted as needed to meet the needs and interests of the students and the time restraints of the course.

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Introduction to DAW Apply the basic functions of a digital audio workstation (DAW) to manipulate recorded sound Produce music using a modern framework, demonstrating how music is structured around the different elements of a song Utilize basic keyboard skills	Active listening using guided presentations Weekly listening (song analysis worksheet) Socratic questioning Complete simple tasks with guided visual instruction Collaborative composition Explore song structure Guided instruction Peer feedback Individual and group projects Mini projects and drills to reinforce knowledge	Set up a project in the DAW using the correct parameters Collaborative composition Project support worksheets Project rubrics Practice assignments and mini projects Question and answer sessions Observation of student work Quizzes Peer/self-assessment Exit tickets	In-class research activities Teacher-created presentations Interactive presentations Instructional videos Hardware/technology videos and tutorials Musical DAWs: Students take turns adding elements to create a song in a simple AB structure using loops Midi keyboards and beginning piano mini-lessons & exercises Soundtrap Cheat Sheet	Advanced Students: Limit time on each step of activity; extend composition to full song structure Special Education, 504, ELL: Extend time on each step of activity; individual support See additional modifications here.

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
	Introductory keyboard and primary chord exercises using small midi keyboards (Anticipatory sets) Class discussion of historical information, artists, music genres, and trends in the music industry Group discussion of classroom tasks		Video - From Phonographs to Spotify: A Brief History of the Music Industry PBS Sound Field videos Incredibox Learning Music (Ableton)	
The Science of Sound Identify the physical properties and behavior of sound waves Describe how sound is perceived Consider the ways in which technology and the science of sound can be integrated into the human creative process ***Amazing Instruments of Music Technology*** Describe major innovations in music technology	Active listening by using guided notes (example) to follow the presentation Intro to Acoustics (example) Weekly listening (song analysis worksheet) Socratic questioning Complete simple tasks with guided visual instruction Collaborative composition Explore song structure Guided instruction Peer feedback Individual and group projects Mini projects and drills to reinforce knowledge	Intro to Acoustics Lesson Assessment Project - Use WD-1 DJ Trainer to compose and perform a beat and rap lyrics using information from the unit Collaborative composition Project support worksheets Project rubrics Practice assignments and mini projects Question and answer sessions Observation of student work Quizzes Peer/self-assessment Exit tickets	Video link library Recommended Text and Projects - Alfred's Music Tech 101 Unit 1 TeachRock Tech Tools - Sound Wave - Explore synthesizer tones Handout - Sound Waves Learning Music (Ableton) Building Beats Project Based Learning activities Additional Bandlab Projects PBS Sound Field videos Digital Music Innovations projects History of Technology in Music by Sarah Wallin-Huff Listening/Analysis exercises (Great	*Advanced Students:* Limit time on each step of activity; extend compositions to full song structure Work independently or pair with another student to help them. Add additional elements to project (drum beat, bass line, etc.) *Special Education, 504, ELL*: Extend time on each step of activity; individual support Work in pairs with additional teacher support.

SLO – WALT **We are learning to/that**	**Student Strategies**	**Formative Assessment**	**Activities and Resources**	**Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections**
Describe the function of the machines of music technology, the recording formats, and their inventors Recognize and explain the difference between analog and digital sound ***Evolution of Recording Mediums*** Connect early forms of audio recording to modern innovations in music technology Identify how the advancements in music technology and societal/cultural norms and needs have affected one another Evaluate the effects of technology on history and culture Music can reflect broader cultural issues	Project based learning- Create composition independently or in pairs Reinforce knowledge by creating a rap with information from the unit Peer feedback Class discussion of historical information, artists, music genres, and trends in the music industry Group discussion of classroom tasks		resources - Digital Music Innovations, The Music Espionage) In-class research activities Teacher-created presentations Interactive presentations Instructional videos Hardware/technology videos	Advanced Students: Supplemental project (example) Special Education: Alternate Project (example) *Additional Modifications:* Additional time on assignments and assessments Pairing oral instruction with visuals Study guides Modified content Modified grading Reduce length of assignments and assessments Modify assessment format Preferential seating Copy of notes and presentations Other modifications as dictated in student's IEP/504 plan Provide models of completed assignments Student collaboration Additional/extra credit assignments

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Multitracking redefined the possibilities of audio recording Trace musical expression to the specific historical and social context from which it emerged				

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
DAW Basic Skills - Students will demonstrate their ability to use the basic features of a DAW in a scavenger hunt format	- Additional time - Provide samples of completed projects - Student collaboration - Modify length of assessment - Provide extension activities - See additional modifications here.

Benchmark Assessment 2

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Students will use the DAW to create a commercial advertisement for a piece of music/recording technology from any time period	- Additional time - Provide samples of completed projects - Student collaboration - Modify length of assessment - Provide extension activities - See additional modifications here.

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Cumulative Test	- Additional time - Modify number of choices for multiple choice questions - Provide study guide - Provide copy of notes and presentations - Modify length of assessment - See additional modifications here.

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Science: This curriculum examines acoustics, the transfer of energy as sound waves, and the various ways in which this energy is used in technology and communication. - Social Sciences - This curriculum examines the development of music technology from a social and historical perspective, taking into consideration how technology met the needs of a changing society as well as how music technology shaped social interactions and societal norms. - Technology: Using application software, system software, and hardware in artistic design. Analyze the implications of advancements in music technology and discuss controversial technological issues.	See additional modifications here.

Music Technology and Applications

Unit 2: Music Recording, Production & Engineering

Grade level: 9-12
Timeframe: 4-5 Weeks

Guiding Questions

How do musicians generate creative ideas?
How do musicians make creative decisions?
How do musicians improve the quality of their creative work?
How do musicians make meaningful connections to creating, performing and responding?
How do individuals choose music to experience?
How does understanding the structure and context of music inform a response?
When is creative work ready to share?
How do other arts disciplines, contexts, and daily life inform creating, performing, and responding to music?
How does understanding the structure & context of musical works inform a performance?
How do individuals choose music to experience? How does understanding the structure and context of music inform a response?
How do we judge the quality of musical work(s) and performance(s)
How do performers interpret musical works?

Standards

Standards (Taught and Assessed)
1.3B.12prof.Cr1a: Describe how sounds and short musical ideas can be used to represent personal experiences, moods, visual images, and/or storylines.
1.3B.12prof.Cr2a: Assemble and organize sounds or short musical ideas to create initial expressions of selected experiences, moods, images or storylines.
1.3B.12prof.Cr2b: Identify and describe the development of sounds or short musical ideas in drafts of music within simple forms (e.g., one part, cyclical, binary).
1.3B.12prof.Cr3a: Identify, describe and apply teacher-provided criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.
1.3B.12prof.Cr3b: Share music through the use of notation, performance or technology, and demonstrate how the elements of music have been employed to realize expressive intent.
1.3B.12prof.Cn10a: Demonstrate how interests, knowledge and skills relate to personal choices and intent when creating, performing, and responding to music.

1.3B.12prof.Cn11a: Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.
1.3E.12prof.Cr1a: Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.
1.3E.12prof.Cr2a: Select melodic, rhythmic and harmonic ideas to develop into a larger work using digital tools and resources.
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.
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.
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.
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.
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.
1.3E.12prof.Re9a: Evaluate music using criteria based on analysis, interpretation, digital and electronic features, and personal interests.

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.3.12.AR.5 Describe the career opportunities and means to achieve those opportunities in each of the Arts, A/V Technology & Communications Career Pathways.
- 9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.
- 9.3.12.AR-AV.1 Describe the history, terminology, occupations and value of audio, video and film technology.
- 9.3.12.AR-AV.2 Demonstrate the use of basic tools and equipment used in audio, video and film production.
- 9.3.12.AR-AV.4 Design an audio, video and/or film production.
- 9.4.12.CI.1: Demonstrate the ability to reflect, analyze and use creative skills and ideas.
- 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills

https://www.nj.gov/education/safety/wellness/selearning/docs/SELCompetencies.pdf

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Projects and assessments from previous unit	- Small group or paired assignments - Additional time - Pairing oral instruction with visuals - Repeat directions - Alternative assessment - See additional modifications here.

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Listen, recognize, and recreate timbre Change octaves, velocity, reverb, and synthesized sounds Tone color/timbre affects how a sound is perceived Recognize and apply popular song structure Identify and incorporate melodic and harmonic building blocks into larger works of music	Active listening using guided presentations Weekly listening (song analysis worksheet) Socratic questioning Complete simple tasks with guided visual instruction Collaborative composition Explore song structure Guided instruction Peer feedback Individual and group projects Mini projects and drills to reinforce knowledge Class discussion of historical information,	Practice assignments and mini projects Question and answer sessions Observation of student work Quizzes Peer/self-assessment Everything is a Remix assessment Drum Programming - program a drum pattern using given notation Create short compositions in the style of given artists/genres (suggested resource - Bandlab Academy) Exit tickets	In-class research activities Teacher-created presentations Interactive presentations Instructional videos Hardware/technology videos and tutorials Bandlab Curriculum Additional Bandlab Projects Midi keyboards and beginning piano mini-lessons & exercises Soundtrap Cheat Sheet Popular Song Structure presentation and worksheet PBS Sound Field videos	Walk-through video guides Individualized instructional support Modified grading Modified tasks Extension tasks Additional time on assignments and assessments Pairing oral instruction with visuals Study guides Reduce length of assignments and assessments Modify assessment format Preferential seating

SLO – WALT **We are learning to/that**	**Student Strategies**	**Formative Assessment**	**Activities and Resources**	**Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections**
Map sounds, record and quantize multiple tracks Recognize and apply common chord progressions Recognize and create musical texture Program basic drum sequences Edit rhythms and utilize in-program virtual drum kits Create drum patterns from various genres Utilize musical knowledge and technological skills to create a remix Use a microphone to record a vocal track Manipulate recorded audio using digital signal processing and audio effects	artists, music genres, and trends in the music industry Group discussion of classroom tasks		Digital Music Innovations projects Incredibox Learning Music (Ableton) Lessons in Trap Music Building Beats Project Based Learning activities Listening/Analysis exercises (Great resources - Digital Music Innovations, The Music Espionage) - Identify elements as they are introduced in a song - Identify tempo - Identify rhythmic elements (syncopation, “four on the floor” style) Virtual drum kit Notate drum patterns using a grid Play drum patterns using the midi keyboard Leveled drum programming exercise Downloadable MIDI file stems Recommended Texts/Programs:	Copy of notes and presentations Provide models of completed assignments Other modifications as dictated in student’s IEP/504 plan - See additional modifications here.

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Edit recorded sound to create an effective mix Describe the process of setting up live sound equipment Describe signal flow			- Alfred's Music Tech 101 - MusicEDU - Digital Music Innovations - Soundtrap - Bandlab - Building Beats	

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Project - Create a remix using sample packs from popular music	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Video guides - Option to add extra element - See additional modifications here.

Benchmark Assessment 2

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Project - Mix raw, multitrack stems	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Video guides - Option to add extra element - See additional modifications here.

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Students will create an original composition using all of the basic features of a DAW including using and editing loops and samples, creating a MIDI track, using automation, FX, and arranging, and mixing. OR Choose from the library of Music Technology projects	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Video guides - Option to add extra element - See additional modifications here.

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Math: Use mathematical concepts to determine and create patterns and rhythm - Social Sciences: Identify compositional techniques used in different styles and genres of music vary according to prescribed sets of rules. Identify stylistic considerations that vary across genres, cultures, and historical eras. Examine the development of music technology from a social and historical perspective, taking into consideration how technology met the needs of a changing society as well as how music technology shaped social interactions and societal norms. - Technology: Using application software, system software, and hardware in artistic design. Analyze the implications of advancements in music technology and discuss controversial technological issues.	- See additional modifications here.

Music Technology and Applications

Unit 3: Culture, Sound Design, & Synthesis

Grade level: 9-12
Timeframe: 6-8 Weeks

Guiding Questions

How do musicians generate creative ideas?
How do musicians make creative decisions?
How do musicians improve the quality of their creative work?
How do musicians make meaningful connections to creating, performing and responding?
How do individuals choose music to experience?
How does understanding the structure and context of music inform a response?
When is creative work ready to share?
How do other arts disciplines, contexts, and daily life inform creating, performing, and responding to music?
How does understanding the structure & context of musical works inform a performance?
How do individuals choose music to experience? How does understanding the structure and context of music inform a response?
How do we judge the quality of musical work(s) and performance(s)
How do performers interpret musical works?

Standards

Standards (Taught and Assessed)
1.3B.12prof.Cr1a: Describe how sounds and short musical ideas can be used to represent personal experiences, moods, visual images, and/or storylines.
1.3B.12prof.Cr2a: Assemble and organize sounds or short musical ideas to create initial expressions of selected experiences, moods, images or storylines.
1.3B.12prof.Cr2b: Identify and describe the development of sounds or short musical ideas in drafts of music within simple forms (e.g., one part, cyclical, binary).
1.3B.12prof.Cr3a: Identify, describe and apply teacher-provided criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.
1.3B.12prof.Cr3b: Share music through the use of notation, performance or technology, and demonstrate how the elements of music have been employed to realize expressive intent.
1.3B.12prof.Cn10a: Demonstrate how interests, knowledge and skills relate to personal choices and intent when creating, performing, and responding to music.

1.3B.12prof.Cn11a: Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.
1.3E.12prof.Cr1a: Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.
1.3E.12prof.Cr2a: Select melodic, rhythmic and harmonic ideas to develop into a larger work using digital tools and resources.
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.
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.
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.
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.
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.
1.3E.12prof.Re9a: Evaluate music using criteria based on analysis, interpretation, digital and electronic features, and personal interests.

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.3.12.AR.4 Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.
- 9.3.12.AR.5 Describe the career opportunities and means to achieve those opportunities in each of the Arts, A/V Technology & Communications Career Pathways.
- 9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.
- 9.3.12.AR-AV.1 Describe the history, terminology, occupations and value of audio, video and film technology.
- 9.3.12.AR-AV.2 Demonstrate the use of basic tools and equipment used in audio, video and film production.
- 9.3.12.AR-AV.4 Design an audio, video and/or film production.
- 9.3.12.BM.5 Implement systems, strategies and techniques used to manage information in a business.
- 9.3.MK.2 Implement marketing research to obtain and evaluate information for the creation of a marketing plan.
- 9.3.MK.9 Communicate information about products, services, images and/or ideas to achieve a desired outcome.
- 9.3.MK-COM.1 Apply techniques and strategies to convey ideas and information through marketing communications.
- 9.4.12.CI.1: Demonstrate the ability to reflect, analyze and use creative skills and ideas.
- 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.
- 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills, and abilities

- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice
- 9.4.12.DC.1: Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content
- 9.4.12.DC.6: Select information to post online that positively impacts personal image and future college and career opportunities.

Social-Emotional Learning Competencies
- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills

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Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Projects and assessments from previous unit	- Small group or paired assignments - Additional time - Pairing oral instruction with visuals - Repeat directions - Alternative assessment - See additional modifications here.

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
The Technology of Rock & Roll Describe the development of the electric guitar and its importance as the	Active listening using guided presentations Weekly listening (song analysis worksheet) Socratic questioning	Practice assignments and mini projects Question and answer sessions Observation of student work Quizzes	In-class research activities Teacher-created presentations Interactive presentations Instructional videos	Walk-through video guides Individualized instructional support Modified grading Modified tasks Extension tasks

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
primary instrument for rock and roll Describe how effect pedals are used Identify new music genres that were born from rock and roll ***The Technology of Hip Hop*** Define hip hop as a culture Identify the pillars of hip hop Describe the evolution of hip hop, from turntables to drum machines, synthesizers, samplers, DAWs, and effects processors Identify political and social factors that influenced the rise of hip hop	Complete simple tasks with guided visual instruction Collaborative composition Explore song structure Guided instruction Peer feedback Individual and group projects Mini projects and drills to reinforce knowledge Class discussion of historical information, artists, music genres, and trends in the music industry Group discussion of classroom tasks.	Peer/self-assessment Exit tickets Written responses	Hardware/technology videos and tutorials documentary clips Bandlab Curriculum Additional Bandlab Projects PBS Sound Field videos Digital Music Innovations projects Lessons in Trap Music Building Beats Project Based Learning activities WhoSampled Soundless film clips and trailers Video game clips Video game composer online Copyright court cases Listening/Analysis exercises (Great resources - Digital Music Innovations, The Music Espionage) - Identify elements as they are introduced in a song - Identify tempo - Identify rhythmic elements (syncopation,	Additional time on assignments and assessments Pairing oral instruction with visuals Study guides Reduce length of assignments and assessments Modify assessment format Preferential seating Copy of notes and presentations Provide models of completed assignments Other modifications as dictated in student's IEP/504 plan - See additional modifications here.

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Describe how hip hop influenced mainstream music Analyze the use of hip hop as a vehicle to educate listeners about social and political issues Understand how sampling has affected the evolution of music genres and the diversification of listener bases Demonstrate the use of sampling in music production ***<u>Electronic House Music (EDM)</u>*** Describe the social factors that lead to the development of EDM Demonstrate the use of common EDM sounds and song structure ***<u>Music in Film</u>***			"four on the floor" style) History of Technology in Music by Sarah Wallin-Huff Other Recommended Texts/Programs: - Alfred's Music Tech 101 - MusicEDU - Digital Music Innovations - Soundtrap - Bandlab - Building Beats	

SLO – WALT **We are learning to/that**	**Student Strategies**	**Formative Assessment**	**Activities and Resources**	**Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections**
Identify the difference between diagetic and non-diagetic sound Describe the emotional and psychological effect of music in film Understand how music helps to tell a story Identify the various roles and responsibilities of the creative team in film music production Describe the use of musical motifs and character themes (leitmotifs) Demonstrate the use of foley and sound effects Describe parallel and contrapuntal sound in film ***Sound Design in Video Games*** Examine how different genres shape and define				

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
the sonic experiences within modern video games. Compose evocative soundtracks that immerse players in game play Understand how music and sound have been an exceptionally important aspect of video game design and development Demonstrate how sounds are manipulated to represent visual actions ***<u>Copyright and Fair Use</u>*** Understand copyright laws as they relate to the use of music Research court cases and debate court decisions regarding copyright laws				

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
3.7 - The Music Industry & Creating a Record Label Identify the various roles and pay in the music industry Understand how a song makes money Identify and analyze the various sources of revenue for recording artists Understand how a recording artist presents and markets themself Demonstrate brand marketing Analyze what makes a song a hit and produce a marketable song				

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Sampling (project) - Students will use curated and created samples in an original composition	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Video guides - Option to add extra element - See additional modifications here.

Benchmark Assessment 2

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Film Music (project) - Students will create an original score to accompany a film clip or trailer	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Video guides - Option to add extra element - See additional modifications here.

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Students will create their own fictional record label. This project includes a marketing strategy, artist press kit, social media posts, concert planning, and projected revenue. Additionally, students will create a “hit” song.	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Video guides - Option to add extra element - See additional modifications here.

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Math: Use mathematical concepts to determine and create patterns and rhythm - Social Sciences: Identify compositional techniques used in different styles and genres of music vary according to prescribed sets of rules. Identify stylistic considerations that vary across genres, cultures, and historical eras. Examine the development of music technology from a social and historical perspective, taking into consideration how technology met the needs of a changing society as well as how music technology shaped social interactions and societal norms. - Technology: Using application software, system software, and hardware in artistic design. Analyze the implications of advancements in music technology and discuss controversial technological issues. - Business and Marketing: Use recorded music, performance, and technology as a backdrop to explore brand marketing, business management, and generation of revenue. - Law and Political Science: Explore laws and the court system through cases involving music copyright and fair use.	- See additional modifications here.

Music Technology and Applications

Unit Optional: DJ Skills and Performance (optional unit)
Grade level: 9-12

Timeframe: 4-5 Weeks

Guiding Questions

How do musicians generate creative ideas?
How do musicians make creative decisions?
How do musicians improve the quality of their creative work?
How do performers select repertoire?
How do musicians improve the quality of their performance?
When is a performer judged ready to present?
How do context and the manner in which musical work is presented influence audience response?
How do musicians make meaningful connections to creating, performing and responding?
How do the other arts, other disciplines, contexts, and daily life inform creating, performing and responding to music?
When is creative work ready to share?
How does understanding the structure & context of musical works inform a performance?
How do individuals choose music to experience?
How does understanding the structure and context of music inform a response?
How do we judge the quality of musical work(s) and performance(s)

Standards

Standards (Taught and Assessed)
1.3B.12prof.Cr1a: Describe how sounds and short musical ideas can be used to represent personal experiences, moods, visual images, and/or storylines.
1.3B.12prof.Cr2a: Assemble and organize sounds or short musical ideas to create initial expressions of selected experiences, moods, images or storylines.
1.3B.12prof.Cr2b: Identify and describe the development of sounds or short musical ideas in drafts of music within simple forms (e.g., one part, cyclical, binary).
1.3B.12prof.Cr3a: Identify, describe and apply teacher-provided criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.
1.3B.12prof.Cr3b: Share music through the use of notation, performance or technology, and demonstrate how the elements of music have been employed to realize expressive intent.
1.3B.12prof.Cn10a: Demonstrate how interests, knowledge and skills relate to personal choices and intent when creating, performing, and responding to music.

1.3B.12prof.Cn11a: Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.
1.3E.12prof.Cr1a: Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.
1.3E.12prof.Cr2a: Select melodic, rhythmic and harmonic ideas to develop into a larger work using digital tools and resources.
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.
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.
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.
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.
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.
1.3E.12prof.Re9a: Evaluate music using criteria based on analysis, interpretation, digital and electronic features, and personal interests.

Highlighted Career Ready Practices and 21st Century Themes/Skills

- 9.4.12.CI.1: Demonstrate the ability to reflect, analyze and use creative skills and ideas.
- 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

Social-Emotional Learning Competencies

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills

https://www.nj.gov/education/safety/wellness/selearning/docs/SELCompetencies.pdf

Instructional Plan

Pre-Assessment and Reflection

Pre-Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Projects and assessments from previous unit	- Small group or paired assignments - Additional time - Pairing oral instruction with visuals - Repeat directions - Alternative assessment - See additional modifications here.

Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Set up DJ Gear (controller, software, speakers, headphones) Navigate DJ app software and computer software Navigate and experiment with controller features and functions Perform drums parts (kick, snare, hi-hat) Create a cue point Beat-match with identical tracks Mix using song structure	Class discussion of historical information, artists, music genres, and trends in the music industry Group discussion of classroom tasks Step-by-step independent performance tasks Socratic questioning Guided visual instruction Peer feedback Individual and group projects Mini projects and drills to reinforce knowledge Student reflections	Skill assessment drills Project support worksheets Project rubrics Practice assignments and mini projects Question and answer sessions Observation of student work Quizzes Peer/self-assessment Exit tickets	Building Beats Project Based Learning activities MusicEDU program DJ Spotlights Interactive presentations Instructional videos Hardware/technology videos DJ Controller hardware and/or software Class discussion of the history of DJ culture and the evolution of hardware Listening/Analysis exercises (Great resources - Digital Music Innovations, The Music Espionage) In-class research activities Extension Activities:	Walk-through video guides Individualized instructional support Modified grading Modified tasks Extension tasks Additional time on assignments and assessments Pairing oral instruction with visuals Study guides Reduce length of assignments and assessments Modify assessment format Preferential seating

SLO – WALT We are learning to/that	Student Strategies	Formative Assessment	Activities and Resources	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Beat-match different tracks with the same BPM Beat-match tracks with varying BPM Use scratching and backspin technique Use sampler pads and add special effects to music Use auto looping Utilize special effect parameters Understand filters and how to use them Record a mix Record samples to enhance DJ performance Apply advanced transitions and skills			- Using the cross-fader and volume faders in performance - Using the cue points to beat-match during a performance - Using DAW software to create a unique track - Backspinning battle - Using the auto-loop feature as a performance technique - Using provided DJ tracks to create a three-track set demonstrating transitions Recommended Texts/Programs: - Alfred's Music Tech 101 - MusicEDU - Digital Music Innovations - Soundtrap - Bandlab	Copy of notes and presentations Provide models of completed assignments Other modifications as dictated in student's IEP/504 plan - See additional modifications here.

Benchmark Assessment 1

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Performance task - Beatmatching	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Provide extension activities - See additional modifications here.

Benchmark Assessment 2

Benchmark Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Performance task - Making a mix	- Additional time - Provide samples of completed projects - Student collaboration - Break project into smaller components - Modify length of assessment - Provide extension activities - See additional modifications here.

Summative Assessments (add rows as needed)

Summative Assessment	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
Cumulative Quiz Final Performance task - Demonstrate advanced transitions and skills	- Additional time - Modify number of choices for multiple choice questions - Provide study guide - Provide copy of notes and presentations - Modify length of assessment - See additional modifications here.

Interdisciplinary Connections

Interdisciplinary Connections	Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections
- Science: This curriculum examines acoustics, the transfer of energy as sound waves, and the various ways in which this energy is used in technology and communication. - Social Sciences - This curriculum examines the development of music technology from a social and historical perspective, taking into consideration how technology met the needs of a changing society as well as how music technology shaped social interactions and societal norms.	- See additional modifications here.