CURRICULUM

FOR

INTRODUCTION TO RECORDING, PRODUCTION, AND MUSIC TECHNOLOGY

GRADES 9-12

This curriculum is part of the Educational Program of Studies of the Rahway Public Schools.

ACKNOWLEDGMENTS

Joseph Elefante, Program Supervisor of Fine & Performing Arts, Family & Consumer Science, and Business

The Board acknowledges the following who contributed to the preparation of this curriculum.

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Subject/Course Title:
Introduction to Recording, Production, & Music Tech.
Grades 9-12

Date of Board Adoption:
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RAHWAY PUBLIC SCHOOLS CURRICULUM

Introduction to Recording, Production, and Music Technology, Grades 9-12

PACING GUIDE

Unit	Title	Pacing
1	What is Music? Developing the Student Musician	4 weeks
2	Music Theory/Literacy Development- presented daily throughout the course in daily lessons*	* weeks
3	Introduction to Piano, Performance Development- presented daily throughout the course in daily lessons*	* weeks
4	Introduction to DAWS	7 weeks
5	Introduction to Microphone, Recording Techniques	7 weeks
6	The Physics of Sound/Manipulating Sound/Filters	7 weeks
7	Developing Audio Production Techniques/Introduction to Ableton and Looping Software	7 weeks
8	Introduction to Film Scoring, Sound Design	8 weeks

ACCOMMODATIONS

504 Accommodations:

- Provide scaffolded vocabulary and vocabulary lists.
- Provide extra visual and verbal cues and prompts.
- Provide adapted/alternate/excerpted versions of the text and/or modified supplementary materials.
- Provide links to audio files and utilize video clips.
- Provide graphic organizers and/or checklists.
- Provide modified rubrics.
- Provide a copy of teaching notes, especially any key terms, in advance.
- Allow additional time to complete assignments and/or assessments.
- Provide shorter writing assignments.
- Provide sentence starters.
- Utilize small group instruction.
- Utilize Think-Pair-Share structure.
- Check for understanding frequently.
- Have student restate information.
- Support auditory presentations with visuals.
- Weekly home-school communication tools (notebook, daily log, phone calls or email messages).
- Provide study sheets and teacher outlines prior to assessments.
- Quiet corner or room to calm down and relax when anxious.
- Reduction of distractions.
- Permit answers to be dictated.
- Hands-on activities.
- Use of manipulatives.
- Assign preferential seating.
- No penalty for spelling errors or sloppy handwriting.
- Follow a routine/schedule.
- Provide student with rest breaks.
- Use verbal and visual cues regarding directions and staying on task.
- Assist in maintaining agenda book.

IEP Accommodations:

- Provide scaffolded vocabulary and vocabulary lists.
- Differentiate reading levels of texts (e.g., Newsela).
- Provide adapted/alternate/excerpted versions of the text and/or modified supplementary materials.
- Provide extra visual and verbal cues and prompts.
- Provide links to audio files and utilize video clips.
- Provide graphic organizers and/or checklists.
- Provide modified rubrics.
- Provide a copy of teaching notes, especially any key terms, in advance.
- Provide students with additional information to supplement notes.
- Modify questioning techniques and provide a reduced number of questions or items on tests.
- Allow additional time to complete assignments and/or assessments.
- Provide shorter writing assignments.
- Provide sentence starters.
- Utilize small group instruction.
- Utilize Think-Pair-Share structure.
- Check for understanding frequently.
- Have student restate information.
- Support auditory presentations with visuals.
- Provide study sheets and teacher outlines prior to assessments.
- Use of manipulatives.
- Have students work with partners or in groups for reading, presentations, assignments, and analyses.
- Assign appropriate roles in collaborative work.
- Assign preferential seating.
- Follow a routine/schedule.

Gifted and Talented Accommodations:

- Differentiate reading levels of texts (e.g., Newsela).
- Offer students additional texts with higher lexile levels.
- Provide more challenging and/or more supplemental readings and/or activities to deepen understanding.
- Allow for independent reading, research, and projects.
- Accelerate or compact the curriculum.
- Offer higher-level thinking questions for deeper analysis.
- Offer more rigorous materials/tasks/prompts.
- Increase number and complexity of sources.
- Assign group research and presentations to teach the class.

ELL Accommodations:

- Provide extended time.
- Assign preferential seating.
- Assign peer buddy who the student can work with.
- Check for understanding frequently.
- Provide language feedback often (such as grammar errors, tenses, subject-verb agreements, etc…).
- Have student repeat directions.
- Make vocabulary words available during classwork and exams.
- Use study guides/checklists to organize information.
- Repeat directions.
- Increase one-on-one conferencing.
- Allow student to listen to an audio version of the text.
- Give directions in small, distinct steps.

● Assign/allow for leadership roles during collaborative work and in other learning activities.	● Allow copying from paper/book. ● Give student a copy of the class notes. ● Provide written and oral instructions. ● Differentiate reading levels of texts (e.g., Newsela). ● Shorten assignments. ● Read directions aloud to student. ● Give oral clues or prompts. ● Record or type assignments. ● Adapt worksheets/packets. ● Create alternate assignments. ● Have student enter written assignments in criterion, where they can use the planning maps to help get them started and receive feedback after it is submitted. ● Allow student to resubmit assignments. ● Use small group instruction. ● Simplify language. ● Provide scaffolded vocabulary and vocabulary lists. ● Demonstrate concepts possibly through the use of visuals. ● Use manipulatives. ● Emphasize critical information by highlighting it for the student. ● Use graphic organizers. ● Pre-teach or pre-view vocabulary. ● Provide student with a list of prompts or sentence starters that they can use when completing a written assignment. ● Provide audio versions of the textbooks. ● Highlight textbooks/study guides. ● Use supplementary materials. ● Give assistance in note taking ● Use adapted/modified textbooks. ● Allow use of computer/word processor. ● Allow student to answer orally, give extended time (time-and-a-half). ● Allow tests to be given in a separate location (with the ESL teacher). ● Allow additional time to complete assignments and/or assessments. ● Read question to student to clarify. ● Provide a definition or synonym for words on a test that do not impact the validity of the exam. ● Modify the format of assessments. ● Shorten test length or require only selected test items. ● Create alternative assessments. ● On an exam other than a spelling test, don't take points off for spelling errors.

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: What is music? Developing the student musician

Target Course/Grade Level: Grades 9 - 12

Unit Summary: An introduction to classroom procedures, how to use the music technology lab hardware, software, and how to communicate about music.

Approximate Length of Unit: 4 weeks

LEARNING TARGETS

NJ Student Learning Standards:

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

1.3E.12prof.Pr4b. Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.

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.

1.3E.12acc.Pr4a. Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.

1.3E.12acc.Pr4b. Describe and provide examples of how context, musical aspects of the composition, and digital media/tools inform prepared and improvised performances.

1.3E.12acc.Pr4c. Demonstrate how understanding the style, genre, context, and use of digital tools and resources in a varied repertoire of music influences prepared or improvised performances and performers' ability to connect with audiences.

1.3E.12adv.Pr4a. Develop and apply criteria to select varied programs to study and perform based on interest, an understanding of the musical characteristics, expressive challenges in the music, and the performer's musical skill using digital tools and resources.

1.3E.12adv.Pr4b. Examine, evaluate and critique how context, musical aspects of the composition and digital media/tools inform prepared and improvised performances.

1.3E.12adv.Pr4c. Demonstrate how understanding the style, genre, context, and integration of digital technologies in a varied repertoire of music informs and influences prepared and improvised performances and their ability to connect with audiences.

Career Readiness, Life Literacies, and Key Skills:

9.4.12.CI.3. Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).

9.4.12.CT.1. Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).
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).
9.4.12.TL.1. Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).

Interdisciplinary Connections and Standards:

8.1.12.CS.2. Model interactions between application software, system software, and hardware.
8.1.12.CS.3. Compare the functions of application software, system software, and hardware.
8.1.12.IC.1. Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words
RST.11-12.4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

Unit Understandings:

Students will understand that…

- Develop and produce music as a form of communication, focusing on applying creativity
- Develop an understanding of the process of music creation
- Develop an appreciation and respect of other world cultures and societies
- Explore how technology is used in the production of music
- Explore the use of technology in the recording of "electronic" and "non-electronic" music
- Discover how technology is a tool in live music performance
- Develop an understanding for the proper management, care and operation of music technology hardware and software

Unit Essential Questions:

- What are the qualities that differentiate between music and sound?
- How does music technology affect the creation and delivery of music today?
- What does music say about us?
- How has technology changed the way we consume music?

Knowledge and Skills:

Students will know...

- What is music?
- Differences between produced "Music & Sound"
- Electronic music vs. Non-Electronic Music

- Procedures for proper handle/care/maintenance of hardware and software
- Music has always been intertwined with various cultures. Various factors influenced how composers of different periods wrote their music and how society/culture acted in response to the artistic creation
- Applying musical knowledge is a foundation in determining, analyzing, critiquing a quality performance

Students will be able to...

- Articulate how technology is used in the production of music.
- Navigate and use basic elements of the course's computer programs.
- Properly and carefully handle and care for all equipment in the lab: Keyboard and PC, Computer & Equipment care, Computer Navigation (shortcut commands, proper software care, file saving and workspace management protocol.

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Teacher demonstration and student exploration of devices and software
- Project formative assessment on program walk- through
- Assessment on hardware care and handling and software procedures
- Teacher observations of student progress
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- Introduction to hardware in music technology lab, walk through of audacity, finale, musictheory.net
- Teacher demonstration and student exploration of devices and software
- Student "show & tell" project on personal example of music
- Student response to teacher examples of music (John Cage, Oregon, DJ, sampling Ted Talk)
- Student journal response to teacher examples of music (Do Now)

RESOURCES

Teacher Resources:

- Elliott, D. (2014). *Music Matters: A New Philosophy of Music Education*. *Second edition*. Oxford University Press
- Reimer, B. (2002). *A Philosophy of Music Education. Third edition*. Prentice-Hall, Inc.
- Freedman, B. (2013). *Teaching Music Through Composition: A Curriculum Using Technology*. Oxford University Press

Equipment Needed:

- Piano
- Keyboard
- Computers
- Internet
- Finale notation software
- Sound system
- Music library
- White board
- Projector
- Various media
- Recording software

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: Music Theory/Literacy Development

Target Course/Grade Level: Grades 9 – 12

Unit Summary: A foundation of music theory and literacy skills that will support the exploration of music technology, recording and production throughout the course.

Approximate Length of Unit: This unit is designed to be presented as part of daily instruction throughout the entire course (a portion of every class period)

LEARNING TARGETS

NJ Student Learning Standards:

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

1.3E.12prof.Pr4b. Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.

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.

1.3E.12acc.Pr4a. Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.

1.3E.12acc.Pr4b. Describe and provide examples of how context, musical aspects of the composition, and digital media/tools inform prepared and improvised performances.

1.3E.12acc.Pr4c. Demonstrate how understanding the style, genre, context, and use of digital tools and resources in a varied repertoire of music influences prepared or improvised performances and performers' ability to connect with audiences.

1.3E.12adv.Pr4a. Develop and apply criteria to select varied programs to study and perform based on interest, an understanding of the musical characteristics, expressive challenges in the music, and the performer's musical skill using digital tools and resources.

1.3E.12adv.Pr4b. Examine, evaluate and critique how context, musical aspects of the composition and digital media/tools inform prepared and improvised performances.

1.3E.12adv.Pr4c. Demonstrate how understanding the style, genre, context, and integration of digital technologies in a varied repertoire of music informs and influences prepared and improvised performances and their ability to connect with audiences.

1.3E.12prof.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.

1.3E.12acc.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools and resources

1.3E.12adv.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions and improvisations that incorporate digital tools and resources.

Career Readiness, Life Literacies, and Key Skills:

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).
9.4.12.DC.1. Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content (e.g., 6.1.12.CivicsPR.16.a).
9.4.12.DC.2. Compare and contrast international differences in copyright laws and ethics.
9.4.12.TL.1. Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).

Interdisciplinary Connections and Standards:

8.1.12.CS.2. Model interactions between application software, system software, and hardware.
8.1.12.CS.3. Compare the functions of application software, system software, and hardware.
8.1.12.IC.1. Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices
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.12acc.Cr3a.** Identify, describe, and apply selected teacher-provided or personally developed criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
NJSLSA.R6. Assess how point of view or purpose shapes the content and style of a text.
NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
RH.11-12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

Unit Understandings:

Students will understand that…

- Develop an understanding of the musical literacy, the basic rules of notation and experience a wide variety of music listening experiences.

- Gain an elementary understanding of rhythmic and tonal harmony including key signatures, time signatures, chord structure etc.
- Develop a basic understanding of intervals from unison through octaves.
- Apply a system of counting to music for the purpose of efficient learning and performance accuracy; subdividing larger rhythms for performance accuracy.

Unit Essential Questions:

- How can you draw on all your knowledge of the essential elements of music to produce/perform music efficiently?
- How can I use printed music, chord symbols, rhythm, and notation to produce music using technology?
- With my understanding of musical concepts, does the creation of art yield higher quality? Why or why not?
- What evidence can you site to articulate both positive and negative aspects of a foundation of musical understanding in a constructive manner?

Knowledge and Skills:

Students will know...

- Through reading music at sight, or for the first time, an artist will broaden their ability to create music that can be performed by other musicians.
- Through understanding rhythm and harmony, musical creation can be more layered and complex.
- Through the foundations of musical understanding, the artist's ability to communicate their art becomes more efficient and effective.

Students will be able to...

- Recognize and recall written notation in treble and bass clefs and recognize the names of the notes in the range of C3 all the way up to G5
- Apply basic musical vocabulary including terms relating to but not limited to lines, spaces, accidentals, rhythms, clefs, scales, chords, intervals, melody, accompaniment
- Comfortably play and count the following rhythms: Quarter Notes and Rests Half Notes and Rests Whole Notes and Rests Eighth Notes and Rests
- Apply the concept of scale and chord constructions to all twelve keys
- Synthesize an example of music and deconstruct it using a knowledge of a foundation of musical understanding (tempo, meter, rhythm, texture, quality)
- Applying a system of counting to music for the purpose of efficient learning and performance accuracy; subdividing larger rhythms for performance accuracy

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Students will be given various written quizzes and take home assignments throughout the school year to ensure understanding of the topics at hand
- Project "deconstructing" a musical example in terms of tempo, tonality, texture and other musical context clues
- Teacher observations of student progress
- Online assessment of music theory skills
- Student "show & tell" project demonstrating various musical clues from their example
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- A variety of strategies will be utilized in both rehearsal and instrument lessons, including, but not limited to the following: Lecture Modeling
- Imitation Improvisation Teamwork Listening exercises Visual (use of white board or handouts) Group Work
- Teacher demonstration and student exploration of musical examples, text
- Student response to teacher examples of music
- Student journal response to teacher examples of music (Do Now)

RESOURCES

Teacher Resources:

- Elliott, D. (2014). *Music Matters: A New Philosophy of Music Education*. *Second edition*. Oxford University Press
- Reimer, B. (2002). *A Philosophy of Music Education. Third edition*. Prentice-Hall, Inc.
- Freedman, B. (2013). *Teaching Music Through Composition: A Curriculum Using Technology*. Oxford University Press

Equipment Needed:

- Piano
- Keyboard
- Computers

- Internet
- Finale notation software
- Sound system
- Music library
- White board
- Projector
- Various media
- Recording software

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: Introduction to Piano, Performance Development

Target Course/Grade Level: Grades 9 – 12

Unit Summary: A foundation of piano and performance skills that will support the exploration of recording, production and music technology coursework.

Approximate Length of Unit: This unit is designed to be presented as part of daily instruction throughout the entire course (a portion of every class period)

LEARNING TARGETS

NJ Student Learning Standards:

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.
1.3E.12acc.Pr5a. Develop and implement rehearsal strategies to improve and refine the technical and expressive aspects of prepared and improvised performances in a varied repertoire of music.
1.3E.12adv.Pr5a. Apply appropriate criteria as well as feedback from multiple sources and develop and implement varied strategies to improve and refine the technical and expressive aspects of prepared and improvised performances in varied programs of music.

Career Readiness, Life Literacies, and Key Skills:

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).
9.4.12.DC.1. Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content (e.g., 6.1.12.CivicsPR.16.a).
9.4.12.DC.2. Compare and contrast international differences in copyright laws and ethics.
9.4.12.TL.1. Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).

Interdisciplinary Connections and Standards:

8.1.12.CS.2. Model interactions between application software, system software, and hardware.
8.1.12.CS.3. Compare the functions of application software, system software, and hardware.
8.1.12.IC.1. Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices
1.3D.12nov.Cr1a. Create melodic, rhythmic and harmonic ideas for simple melodies as well as chordal accompaniments for given melodies

1.3D.12int.Cr1a. Create melodic, rhythmic and harmonic ideas for melodies over specified chord progressions or AB/ABA forms as well as two to three-chord accompaniments for given melodies

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

NJSLSA.R6. Assess how point of view or purpose shapes the content and style of a text.

NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

RH.11-12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.

RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

Unit Understandings:

Students will understand that…

- Understand the proper procedure for setting up the body to play piano.
- Apply the ability to read printed music to piano performance and will be able to demonstrate the proper fingerings (in various positions) and names of the notes in the range of C3 all the way up to G5.
- Understand a basic concept of intervals from unison through octaves and demonstrate the ability to play them on the piano in various positions.

Unit Essential Questions:

- How are pianos played, and how do they produce sound? What is the purpose of a synthesizer?
- How can I use printed music, chord symbols, and notation to perform on the piano?
- What are the various positions in which we can play piano and how do they interact with each other?
- With my understanding of musical concepts, is the performance of high quality? Why or Why Not? What evidence can you site in order to articulate both positive and negative aspects of a performance in a constructive manner?
- How does musical fluency on piano improve my ability to produce/create music using technology?

Knowledge and Skills:

Students will know...

- The proper procedure for setting up the body to play piano.
- Design strategies that will help the individual student practice more effectively leading to increased musical independence.

- An develop an ear to assess problem areas and develop ways to correct mistakes. Students will become independent musical learners.

Students will be able to...

- Comfortably play using the following on the piano: C Position, G Position, moving up and down the piano in certain intervals, moving from position to position, thumb under movement.
- Comfortably play and count the following rhythms: Quarter Notes and Rests Half Notes and Rests Whole Notes and Rests

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Students will be evaluated periodically for REHEARSAL ASSESSMENT. Students will be evaluated on the quality of their preparation of their piano repertoire, following rehearsal classroom procedures effectively
- Students will be evaluated periodically for PERFORMANCE ASSESSMENTS, testing musical performance progress within the piano repertoire (Alfred), skill development (chords/scales/intervals, and rhythm exercises)
- Written self-critique on a performance
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- A variety of strategies will be utilized in class including, but not limited to the following: Teacher led musical rehearsal (sight reading, development, refinement, performance)
- Lecture
- Modeling
- Listening exercises
- Group discussion
- Writing prompts, journals
- Teacher observations of student progress

RESOURCES

Teacher Resources:

- Elliott, D. (2014). *Music Matters: A New Philosophy of Music Education*. *Second edition*. Oxford University Press
- Reimer, B. (2002). *A Philosophy of Music Education. Third edition*. Prentice-Hall, Inc.
- Freedman, B. (2013). *Teaching Music Through Composition: A Curriculum Using Technology*. Oxford University Press

Equipment Needed:

- Piano
- Keyboard
- Computers
- Internet
- Finale notation software
- Sound system
- Music library
- White board
- Projector
- Various media
- Recording software

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: Introduction to DAWS

Target Course/Grade Level: Grades 9 – 12

Unit Summary: An introduction and exploration of the function, processes and tools found in DAWs (digital audio workstation)

Approximate Length of Unit: 7 weeks

LEARNING TARGETS

NJ Student Learning Standards:

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

1.3E.12prof.Pr4b. Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.

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.

1.3E.12acc.Pr4a. Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.

1.3E.12acc.Pr4b. Describe and provide examples of how context, musical aspects of the composition, and digital media/tools inform prepared and improvised performances.

1.3E.12acc.Pr4c. Demonstrate how understanding the style, genre, context, and use of digital tools and resources in a varied repertoire of music influences prepared or improvised performances and performers' ability to connect with audiences.

1.3E.12adv.Pr4a. Develop and apply criteria to select varied programs to study and perform based on interest, an understanding of the musical characteristics, expressive challenges in the music, and the performer's musical skill using digital tools and resources.

1.3E.12adv.Pr4b. Examine, evaluate and critique how context, musical aspects of the composition and digital media/tools inform prepared and improvised performances.

1.3E.12adv.Pr4c. Demonstrate how understanding the style, genre, context, and integration of digital technologies in a varied repertoire of music informs and influences prepared and improvised performances and their ability to connect with audiences.

1.3E.12prof.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.

1.3E.12acc.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools and resources

1.3E.12adv.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions and improvisations that incorporate digital tools and resources.

Career Readiness, Life Literacies, and Key Skills:

9.4.12.CI.1. Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
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).
9.4.12.CI.3. Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1)
9.4.12.CT.1. Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).

Interdisciplinary Connections and Standards:

8.1.12.CS.2. Model interactions between application software, system software, and hardware.
8.1.12.CS.3. Compare the functions of application software, system software, and hardware.
8.1.12.IC.1. Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices
1.3D.12nov.Cr1a. Create melodic, rhythmic, and harmonic ideas for simple melodies as well as chordal accompaniments for given melodies
1.3D.12int.Cr1a. Create melodic, rhythmic, and harmonic ideas for melodies over specified chord progressions or AB/ABA forms as well as two to three-chord accompaniments for given melodies
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.12acc.Cr3a.** Identify, describe, and apply selected teacher-provided or personally developed criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
NJSLSA.R6. Assess how point of view or purpose shapes the content and style of a text.
NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
RH.11-12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

Unit Understandings:

Students will understand that…

- Develop knowledge of how to use a Digital Audio Workstation (DAW), such as Audacity/Soundation Pro Tools Express to create new original projects.
- Learn that they can make original creations on the computer by using pre-recorded music.
- Navigate readily available and relatively easy to use programs can be used to create new music projects.
- Discover that existing sound sources can be imported and used as "sound materials" for projects. Recording new music is not the only option.

Unit Essential Questions:

- How can a DAW be used to import existing sound sources to create an original sounding "sound-scape".
- Can mixing and matching audio be considered creating "music"/art?
- 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?

Knowledge and Skills:

Students will know...

- Import, edit, copy, paste, re-arrange audio files.
- Export as an mp3.
- Navigate and utilize a Digital Audio Workstation.
- Select cohesive song excerpts for use in a Mash-up.
- Map a contemporary song utilizing knowledge of AB form.
- Import and edit music files to create a Mash-up.
- Select a Podcast topic.
- Select, import and edit music files for use in a Podcast.
- Record and edit a "voice over" style narration for the Podcast.

Students will be able to...

- Navigate readily available and relatively easy to use programs can be used to create new music projects.
- Discover that existing sound sources can be imported and used as "sound materials" for projects. Recording new music is not the only option.
- Demonstrate their ability to add software instrument tracks by creating a file with three software instrument tracks.
- Demonstrate their ability to add prerecorded loops from the software's loops library by creating three tracks with loops.
- Use their knowledge of AB song form to guide song writing/composition.
- Learn what are the traits of a quality Mash-up?
- Learn what are the traits of a quality Podcast?

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Progress "check points" for each project.
- Summative listening session with completed rubric, notes and comments.
- Student presentation of project to class.
- Teacher observations of student progress.
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- The teacher will provide a demonstration of each project, include desirable traits and standards for each project type.
- Students will use the DAWs in a hands-on fashion to create the projects.
- Create an audio thunder/lightning/rainstorm by combining individual sound effects (rain, wind, thunder).
- Create a free form, three track composition utilizing DAW.
- Create a three track composition utilizing and editing prerecorded samples, using looping software.
- Demonstrate understanding of AB form by analyzing and mapping a contemporary music piece on a song analysis worksheet
- Create a three track composition utilizing looping software demonstrating AB form.
- Create a Mash-up: a song or composition created by blending two or more pre-recorded songs.
- Create a Podcast, Unit.

RESOURCES

Teacher Resources:

- Alfred Adult Method for Piano Book 1.
- Elliott, D. (2014). *Music Matters: A New Philosophy of Music Education. Second edition*. Oxford University Press.
- Reimer, B. (2002). *A Philosophy of Music Education. Third edition*. Prentice-Hall, Inc.
- Freedman, B. (2013). *Teaching Music Through Composition: A Curriculum Using Technology*. Oxford University Press
- Avid. Pro Tools 9 and 10 Reference Guides http://avid.force.com/pkb/articles/en_US/User_Guide/en379111.
- Keane, J. *The Musician's Guide to Pro Tools*. McGraw-Hill Osborne Media
- Strong, J. *Pro Tools All-in-One Desk Reference for Dummies*. Wiley Publishing, Inc.

Equipment Needed:

- Piano
- Keyboard
- Computers
- Internet
- Finale notation software
- Sound system
- Music library
- White board
- Projector
- Logic/Pro Tools recording software

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: Introduction to Microphone, Recording Techniques

Target Course/Grade Level: Grades 9 - 12

Unit Summary: An introduction to various types of microphone and recording techniques

Approximate Length of Unit: 7 weeks

LEARNING TARGETS

NJ Student Learning Standards:

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

1.3E.12prof.Pr4b. Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.

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.

1.3E.12acc.Pr4a. Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.

1.3E.12acc.Pr4b. Describe and provide examples of how context, musical aspects of the composition, and digital media/tools inform prepared and improvised performances.

1.3E.12acc.Pr4c. Demonstrate how understanding the style, genre, context, and use of digital tools and resources in a varied repertoire of music influences prepared or improvised performances and performers' ability to connect with audiences.

1.3E.12adv.Pr4a. Develop and apply criteria to select varied programs to study and perform based on interest, an understanding of the musical characteristics, expressive challenges in the music, and the performer's musical skill using digital tools and resources.

1.3E.12adv.Pr4b. Examine, evaluate and critique how context, musical aspects of the composition and digital media/tools inform prepared and improvised performances.

1.3E.12adv.Pr4c. Demonstrate how understanding the style, genre, context, and integration of digital technologies in a varied repertoire of music informs and influences prepared and improvised performances and their ability to connect with audiences.

1.3E.12prof.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.

1.3E.12acc.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools and resources

1.3E.12adv.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions and improvisations that incorporate digital tools and resources.

Career Readiness, Life Literacies, and Key Skills:

9.4.12.CI.1. Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
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).
9.4.12.CI.3. Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1)
9.4.12.CT.1. Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).
9.4.12.TL.1. Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.)

Interdisciplinary Connections and Standards:

8.2.12.ED.3. Evaluate several models of the same type of product and make recommendations for a new design based on a cost benefit analysis.
8.2.12.ED.5. Evaluate the effectiveness of a product or system based on factors that are related to its requirements, specifications, and constraints (e.g., safety, reliability, economic considerations, quality control, environmental concerns, manufacturability, maintenance and repair, ergonomics)

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
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RH.11-12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

Unit Understandings:

Students will understand that…

- The various aspects of music production and how to identify specific music production techniques.
- Learn how to properly execute specific music production techniques.
- Learn the specific types of microphones, how they are constructed and label their parts
- How to determine what types of microphones are appropriate for various situations

Unit Essential Questions:

- What is music production?
- What is a sound system?
- What is a microphone?
- What are the different types of microphones?
- Why are different microphones used in different situations?
- How have microphones changed over time?
- What are standard recording techniques using microphones?

Knowledge and Skills:

Students will know...

- Setup/breakdown and proper placement of a sound reinforcement / recording system.
- Route signals from source to intended destination.
- Set appropriate signal levels throughout the system

Students will be able to...

- How does microphone placement influence a recording?
- What is the importance of sound isolation and acoustical treatments in the recording environment?
- Determine what microphone is required per the project need.
- Test/troubleshoot the system
- Identify mic level vs. line level devices.

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Progress "check points" for each project.
- Summative listening session with completed rubric, notes and comments.
- Student presentation of project to class
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- Setup of various configurations of recording / sound reinforcement projects
- Trouble shoot errors in the setup of various configurations of recording / sound reinforcement project
- Recording lab project demonstrating both a solo vocal, solo instrumental, and group instrumental, vocal

RESOURCES

Teacher Resources:

- Alfred Adult Method for Piano Book 1.
- Elliott, D. (2014). *Music Matters: A New Philosophy of Music Education. Second edition*. Oxford University Press.
- Reimer, B. (2002). *A Philosophy of Music Education. Third edition*. Prentice-Hall, Inc.
- Freedman, B. (2013). *Teaching Music Through Composition: A Curriculum Using Technology*. Oxford University Press
- Avid. Pro Tools 9 and 10 Reference Guides http://avid.force.com/pkb/articles/en_US/User_Guide/en379111.
- Keane, J. *The Musician's Guide to Pro Tools*. McGraw-Hill Osborne Media
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Equipment Needed:

- Piano
- Keyboard
- Computers
- Internet
- Finale notation software
- Sound system
- Music library
- White board
- Projector
- Logic/Pro Tools recording software

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: The Physics of Sound / Manipulating sound / Filters

Target Course/Grade Level: Grades 9 – 12

Unit Summary: Understanding how to manipulate sound, the science of sound

Approximate Length of Unit: 7 weeks

LEARNING TARGETS

NJ Student Learning Standards:

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

1.3E.12prof.Pr4b. Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.

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.

1.3E.12acc.Pr4a. Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.

1.3E.12acc.Pr4b. Describe and provide examples of how context, musical aspects of the composition, and digital media/tools inform prepared and improvised performances.

1.3E.12acc.Pr4c. Demonstrate how understanding the style, genre, context, and use of digital tools and resources in a varied repertoire of music influences prepared or improvised performances and performers' ability to connect with audiences.

1.3E.12adv.Pr4a. Develop and apply criteria to select varied programs to study and perform based on interest, an understanding of the musical characteristics, expressive challenges in the music, and the performer's musical skill using digital tools and resources.

1.3E.12adv.Pr4b. Examine, evaluate and critique how context, musical aspects of the composition and digital media/tools inform prepared and improvised performances.

1.3E.12adv.Pr4c. Demonstrate how understanding the style, genre, context, and integration of digital technologies in a varied repertoire of music informs and influences prepared and improvised performances and their ability to connect with audiences.

1.3E.12prof.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools.

1.3E.12acc.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions or improvisations using digital tools and resources

1.3E.12adv.Cr1a. Generate melodic, rhythmic and harmonic ideas for compositions and improvisations that incorporate digital tools and resources.

Career Readiness, Life Literacies, and Key Skills:

9.4.12.CI.1. Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
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).
9.4.12.CI.3. Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1)
9.4.12.CT.1. Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).
9.4.12.TL.1. Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.)

Interdisciplinary Connections and Standards:

8.2.12.ED.3. Evaluate several models of the same type of product and make recommendations for a new design based on a cost benefit analysis.
8.2.12.ED.5. Evaluate the effectiveness of a product or system based on factors that are related to its requirements, specifications, and constraints (e.g., safety, reliability, economic considerations, quality control, environmental concerns, manufacturability, maintenance and repair, ergonomics)

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

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NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
RH.11-12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

Unit Understandings:

Students will understand that…

- Identify and explain the nature and behavior of sound as a mechanical wave, and describe how sound may be transmitted via mechanical and electronic means.

- Examine various methods of sound transmission and analyze benefits and limitations of various methods.
- Compare and contrast various methods of sound transmission used in common modern consumer electronics.
- Evaluate methods of sound transmission for various real-world applications in terms of practicality, reliability, and versatility.

Unit Essential Questions:

- How is the physics of sound related to music?
- How does the study of music provide essential ways to understand and express life experiences?
- How does participation in music develop self-discipline and focus and develop the capacity to refine work and aspire to high quality standards?
- How does the ability to change and alter audio function as a compositional tool?
- What role do filters play within musical production?

Knowledge and Skills:

Students will know...

- The nature and behavior of sound as a mechanical wave.
- How sound may be transmitted via mechanical and electronic means.
- The benefits and limitations of various methods of sound transmission.
- The qualities of sound transmission in common modern consumer electronics.
- How various methods of sound transmission relate to many real-world applications.
- The functions of EQ, compression and filters.
- The function and effect of volume, panning and reverb.

Students will be able to...

- Through demonstration, experimentation and lecture students will identify and explain the nature and behavior of sound as a mechanical wave, and describe how sound may be transmitted via mechanical and electronic means.
- Examine various methods of sound transmission and analyze/describe benefits and limitations of various methods.
- Compare and contrast various methods of sound transmission used in common modern consumer electronics.
- Evaluate methods of sound transmission for various real-world applications in terms of practicality, reliability, and versatility.
- Mix, EQ, add compression and filters to a sound file. • Adjust the timbre of an instrument utilizing EQ.

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Progress "check points" for each project.
- Summative listening session with completed rubric, notes and comments.
- Student presentation of project to class.
- Teacher observations of student progress.
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- Create a piece of music incorporating preselected segments of prerecorded audio (combining "speech" and loops chose by the teacher), making
- EQ adjustments to at least three tracks within the piece and adding a filter/effect.
- Demonstrate how to alter pitch and add effects within the DAW.
- Create a piece of music incorporating segments of prerecorded audio (combining "speech" and loops chose by student) making EQ adjustments to at least three tracks within the piece and adding a filter/effect.
- Setup of various configurations of recording / sound reinforcement projects.
- Trouble shoot errors in the setup of various configurations of recording / sound reinforcement project.
- Recording lab project demonstrating both a solo vocal, solo instrumental and group instrumental, vocal

RESOURCES

Teacher Resources:

- Alfred Adult Method for Piano Book 1.
- Elliott, D. (2014). *Music Matters: A New Philosophy of Music Education. Second edition*. Oxford University Press.
- Reimer, B. (2002). *A Philosophy of Music Education. Third edition*. Prentice-Hall, Inc.
- Freedman, B. (2013). *Teaching Music Through Composition: A Curriculum Using Technology*. Oxford University Press
- Avid. Pro Tools 9 and 10 Reference Guides http://avid.force.com/pkb/articles/en_US/User_Guide/en379111.
- Keane, J. *The Musician's Guide to Pro Tools*. McGraw-Hill Osborne Media
- Strong, J. *Pro Tools All-in-One Desk Reference for Dummies*. Wiley Publishing, Inc.

Equipment Needed:

- Piano
- Keyboard
- Computers
- Internet
- Finale notation software
- Sound system
- Music library
- White board
- Projector
- Logic/Pro Tools recording software

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: Developing Audio Production Techniques/Introduction to Ableton and Looping Software

Target Course/Grade Level: Grades 9 - 12

Unit Summary: Continued study in using DAWS, introduction into using looping software (Ableton)

Approximate Length of Unit: 7 weeks

LEARNING TARGETS

NJ Student Learning Standards:

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

1.3E.12prof.Pr4b. Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.

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.

1.3E.12acc.Pr4a. Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.

1.3E.12acc.Pr4b. Describe and provide examples of how context, musical aspects of the composition, and digital media/tools inform prepared and improvised performances.

1.3E.12acc.Pr4c. Demonstrate how understanding the style, genre, context, and use of digital tools and resources in a varied repertoire of music influences prepared or improvised performances and performers' ability to connect with audiences.

1.3E.12adv.Pr4a. Develop and apply criteria to select varied programs to study and perform based on interest, an understanding of the musical characteristics, expressive challenges in the music, and the performer's musical skill using digital tools and resources.

1.3E.12adv.Pr4b. Examine, evaluate and critique how context, musical aspects of the composition and digital media/tools inform prepared and improvised performances.

1.3E.12adv.Pr4c. Demonstrate how understanding the style, genre, context, and integration of digital technologies in a varied repertoire of music informs and influences prepared and improvised performances and their ability to connect with audiences.

1.3E.12prof.Cr1a. Generate melodic, rhythmic, and harmonic ideas for compositions or improvisations using digital tools.

1.3E.12acc.Cr1a. Generate melodic, rhythmic, and harmonic ideas for compositions or improvisations using digital tools and resources

1.3E.12adv.Cr1a. Generate melodic, rhythmic, and harmonic ideas for compositions and improvisations that incorporate digital tools and resources.

Career Readiness, Life Literacies, and Key Skills:

9.4.12.CI.1. Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
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).
9.4.12.CI.3. Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1)
9.4.12.CT.1. Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).
9.4.12.TL.1. Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.)

Interdisciplinary Connections and Standards:

8.2.12.ED.3. Evaluate several models of the same type of product and make recommendations for a new design based on a cost benefit analysis.
8.2.12.ED.5. Evaluate the effectiveness of a product or system based on factors that are related to its requirements, specifications, and constraints (e.g., safety, reliability, economic considerations, quality control, environmental concerns, manufacturability, maintenance and repair, ergonomics)
1.3D.12prof.Cr1a. Create melodic, rhythmic, and harmonic ideas for improvisations, compositions (e.g., theme and variation, 12-bar blues), as well as three-or-more-chord accompaniments in a variety of patterns (e.g., arpeggio, country and gallop strumming, finger picking patterns).
1.3D.12acc.Cr1a. Create melodic, rhythmic, and harmonic ideas for compositions (e.g., rounded binary, rondo), improvisations, accompaniment patterns in a variety of styles, as well as harmonization for given melodies.
1.3D.12adv.Cr1a. Create melodic, rhythmic, and harmonic ideas for a collection of compositions and improvisations in a variety of styles, as well as stylistically appropriate harmonization for given melodies.

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
NJSLSA.R6. Assess how point of view or purpose shapes the content and style of a text.
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RH.11-12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

Unit Understandings:

Students will understand that…

- Common methods of digital music composition.
- Methods of composition and advantages and limitations of each.
- Use technology tools to create original works.
- Various methods of composition and arranging in use in current popular music.
- Use electronic composition and arranging tools selectively to create original musical works.
- To provide students with an overview of Logic/Pro Tools/Ableton design, function and features. Enable the use of this Digital Audio.
- Workstation for multi-track recording, mixing and mastering. To understand the process of digital music distribution

Unit Essential Questions:

- How does the study of music provide essential ways to understand and express life experiences?
- How does participation in music develop self-discipline and focus and develop the capacity to refine work and aspire to high quality standards?
- What are ways that electronic composition aids or hinders composers?
- What are ways we can overcome becoming lost in the technology or becoming a slave to it?
- What are the benefits to composing and arranging in a software-based environment?
- How has the use of Digital Audio Workstations such as Pro Tools changed, improved, affected how musicians create, record, and produce music?
- How does one software solution grow to the level of being the accepted norm amongst the majority?
- How have the drastic changes in music distribution changed the ways we perceive, value, and consume music?

Knowledge and Skills:

Students will know...

- Common methods of digital music composition.
- Methods of composition and advantages and limitations of each.
- Use tools to create original works.
- Various methods of composition and arranging in use in current popular music
- Use electronic composition and arranging tools selectively to create original musical works
- Pro Tools can be used to: Record numerous instruments, both acoustic, electric and digital.
- As a MIDI sequencer. To edit tracks and correct pitches and rhythms.
- How tracks can have effects and equalization added to add depth and character to sounds.
- Tracks require mixing in order to achieve balance and the proper desired outcome.
- There are vast resources available to amateur musicians for digital music distribution, in order to make their creations available to the public.

Students will be able to...

- Utilizing Music Tech lab software, students will identify and explain common methods of digital music composition.
- Examine various methods of composition and explore advantages and limitations of each.

- Use tools to create original works.
- Compare and contrast various methods of composition and arranging in use in current popular music.
- Use electronic composition and arranging tools selectively to create their original musical works.
- How Logic/Pro Tools operates and is used in a real-world professional sound recording session, in the follow ways:
- How to assign instruments to tracks.
- How to edit: cut, copy, paste, cross-fade. Assigning instruments, MIDI Tracks, Employing Loops, Automation, Track Effects, Mixing and Mastering
- Upload digital music files to a public music sharing website: Blog, Reverb Nation, Band Camp, iTunes or similar music sharing vehicles

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Progress "check points" for each project.
- Summative listening session with completed rubric, notes and comments
- Student presentation of project to class.
- Teacher observations of student progress.
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- What differentiated learning experiences and instruction will enable all students to achieve the desired results?
- Logic/Pro Tools recording assignment
- Students will learn to record audio by creating their own radio commercial.
- Students will demonstrate their knowledge of audio recording and editing by producing a podcast of their own original content.
- Students will pick a composition to record, along with the teacher's approval.
- One short form and one long form original composition using Digital Audio Workstation loop-based editing software completing a "composer's" checklist
- Peer assessment and review.

RESOURCES

Teacher Resources:

- Alfred Adult Method for Piano Book 1.
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- Avid. Pro Tools 9 and 10 Reference Guides http://avid.force.com/pkb/articles/en_US/User_Guide/en379111.
- Keane, J. *The Musician's Guide to Pro Tools*. McGraw-Hill Osborne Media
- Strong, J. *Pro Tools All-in-One Desk Reference for Dummies*. Wiley Publishing, Inc.

Equipment Needed:

- Piano
- Keyboard
- Computers
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- Finale notation software
- Sound system
- Music library
- White board
- Projector
- Logic/Pro Tools recording software

UNIT OVERVIEW

Content Area: Introduction to Recording, Production & Music Technology

Unit Title: Introduction to Film Scoring, Sound Design

Target Course/Grade Level: Grades 9 – 12

Unit Summary: Application of recording, production and compositional skills to the medium of film scoring

Approximate Length of Unit: 8 weeks

LEARNING TARGETS

NJ Student Learning Standards:

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.Re7. Explain how knowledge of the structure (e.g., repetition, similarities, contrasts), technological aspects, and purpose of the music informs the response.
1.3E.12acc.Re7a. Select and critique contrasting musical works, defending opinions based on manipulations of the elements of music, digital and electronic aspects, and the purpose and context of the works.
1**.3E.12acc.Re7b.** Explain how an analysis of the structure, context and technological aspects of the music informs the response.
1.3E.12adv.Re7a. Select, describe, and compare a variety of musical selections based on characteristics and knowledge of the music, understanding of digital and electronic aspects, and the purpose and context of the works.
1.3E.12adv.Re7b. Justify (by using examples) how an analysis of the structural characteristics, context, and technological and creative decisions, informs interest in and response to the music
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.12acc.Re8a. Connect the influence of the elements of music, digital and electronic features, context, purpose, and other art forms to the expressive intent of musical works.
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.12acc.Cn10a. Demonstrate how interests, knowledge and skills relate to personal choices and intent when creating, performing and responding to music.

Career Readiness, Life Literacies, and Key Skills:

9.4.12.CI.1. Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
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).

9.4.12.CI.3. Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1)
9.4.12.CT.1. Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).
9.4.12.TL.1. Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.)

Interdisciplinary Connections and Standards:

8.2.12.ED.3. Evaluate several models of the same type of product and make recommendations for a new design based on a cost benefit analysis.
8.2.12.ED.5. Evaluate the effectiveness of a product or system based on factors that are related to its requirements, specifications, and constraints (e.g., safety, reliability, economic considerations, quality control, environmental concerns, manufacturability, maintenance and repair, ergonomics)
1.3D.12prof.Cr1a. Create melodic, rhythmic and harmonic ideas for improvisations, compositions (e.g., theme and variation, 12-bar blues), as well as three-or-more-chord accompaniments in a variety of patterns (e.g., arpeggio, country and gallop strumming, finger picking patterns).
1.3D.12acc.Cr1a. Create melodic, rhythmic and harmonic ideas for compositions (e.g., rounded binary, rondo), improvisations, accompaniment patterns in a variety of styles, as well as harmonization for given melodies.
1.3D.12adv.Cr1a. Create melodic, rhythmic and harmonic ideas for a collection of compositions and improvisations in a variety of styles, as well as stylistically appropriate harmonization for given melodies.

NJ SLS Companion Standards: Reading and Writing Standards for History, Social Studies, Science, and Technical Subjects:

NJSLSA.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
NJSLSA.R6. Assess how point of view or purpose shapes the content and style of a text.
NJSLSA.R7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
RH.11-12.7. Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, qualitatively, as well as in words) in order to address a question or solve a problem.
RST.11-12.3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
NJSLSA.W7. Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.

Unit Understandings:

Students will understand that…

- The process of creating auditory material to accompany visual material.
- Understand the variety of techniques to create sound effects, soundscape.

- Understand the variety of techniques to create musical soundtracks or scores.
- The relevance of different historical trends in creating sound/music to accompany video & film.

Unit Essential Questions:

- How does sound support and enhance visual images?
- How can music be used to support and enhance visual images?
- How has the use of audio, sound samples and music changed over time to accompany both video footage and film?
- Why does sound have such an impact on the way we perceive visual stimulus?

Knowledge and Skills:

Students will know...

- Through demonstration and lecture students will identify and explain the process of creating sound effects for visual images on film.
- Through demonstration and lecture students will identify and explain the process of creating musical accompaniment for visual images on film.
- The importance of various techniques and strategies for creating a musical soundtrack for a variety of film styles.
- The importance of being able to identify. A music score's historical placement, influences, defining characteristics: including instrumentation, timbral palate and compositional devices.
- The importance of being able to interpret, match and/or juxtapose the mood and action of visuals with auditory accompaniment.

Students will be able to...

- Create sound effects to accompany visual images: video or film.
- Create musical accompaniment to visual images: video or film.
- Use a variety of techniques and strategies to create a musical soundtrack for a variety of film or video styles. Create their own scores for film scenes based on their interpretations of mood and action.
- Differentiate and articulate the differences in scores used in historical and contemporary films, as well as soundtracks in historical and contemporary video footage.
- Students will critically assess existing film scores.

EVIDENCE OF LEARNING

Assessment:

What evidence will be collected and deemed acceptable to show that students truly "understand"?

- Progress "check points" for each project.
- Summative listening session with completed rubric, notes and comments.
- Student presentation of project to class.

- Teacher observations of student progress.
- Completed sound effects scene for DVD.
- Completed Film scene for DVD.
- Completed YouTube video.
- End of unit assessment

Learning Activities:

What differentiated learning experiences and instruction will enable all students to achieve the desired results?

- Discussions of film clips as related to use of music.
- Sound effects film scene project.
- Musical Score Creation project.
- Creation of DVD of film clips with scores digitally attached.
- Creation of soundtrack to teacher approved and student selected video footage, which will be posted to YouTube.

RESOURCES

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