Hoboken Public Schools

Instrumental Music Curriculum
Grade 9-12

Instrumental Music 9-12

HOBOKEN PUBLIC SCHOOLS

Course Description:

In this course students will become proficient in playing their individual band instrument. They will learn basics such as proper tone production, how to play in tune, and how to play in an ensemble. Students will be introduced to the various ways to tune a band instrument and a band as a whole. They will be able to tune using an electronic tuner app, tune to an emitted pitch, and tune to another player's instrument in the band. Throughout the year, students will focus on reading rhythms, sight reading melodic lines, dynamics, articulation, and blend. Students will be able to identify articulation markings and apply them in performance of concert repertoire. This includes staccato (detached), accents (more aggressive note attack with a trapezoidal release), legato (smooth), marcato (detached and accented, and tenuto (full value). In addition, students will learn the theory behind the music they play as well as participate in listening and analyzing musical pieces that they play. They will understand how key signatures are generated using the circle of fifths and why and how music is written for transposing instruments. Students will also be able to explain how major scales are created and how enharmonics are based off of a piano keyboard.

Interdisciplinary Connections- Mathematics, History, ELA, Physics

Throughout this course, students are exposed to a multitude of cross curricular opportunities, the most significant being Mathematics, History, ELA and Physics. Students will explore meter, tempo, and rhythm, utilizing knowledge of fractions to learn how to subdivide beats and rhythms to play complex patterns. During the year, the students will explore repertoire reflecting various time periods and locations throughout the world. In their analysis of music theory, students will learn of the first written music in the church and how it developed to what we know today. As students explore song form and articulation, they will recognize the cross-pollination of English language and music. Finally, as we explore tone production and intonation, we will learn about the underlying physics of sound and how we can use it to keep our instruments sounding in tune and full.

DEI, Disabled, and LBGTQ Representation

Within this course there is evidence of integration of the contributions of persons with disabilities and lesbian, gay, bisexual, and or transgender people. Additionally, Diversity, Equity, and Inclusion are celebrated in this course to promote our culturally diverse student population as it is imperative that every student can relate to and sees themselves represented with the overall curriculum that is taught. This is evident within units of study that include artists such as

The framework of this course allows students abilities to have choices in the texts read, artists studied and projects created that represent multiple identities, perspectives, and experiences. The resources are multimodal in nature so that students can engage in print, images, sounds,

performances, or video opportunities. This in turn promotes maximum student engagement and achievement as learning procedures connect students to social concerns, while raising critical questions related to race, socioeconomic status, gender, sexual orientation, religion, language, and sustainablity.

<u>This is evident within units of study that include but are not limited to artists such as:</u>
Bright Sheng *(Asian American Composer)*
Zhou Long Bun *(Asian American Composer)*
Ching Lam *(Asian American Composer)*
Heitor Villa-Lobos *(Latin American Composer)*
Ernesto Lecuona *(Latin American Composer)*
Silvestre Revueltas *(Latin American Composer)*
Ludwig van Beethoven *(Composer with Disabilities)*
Django Reinhardt *(Musician with Disabilities)*
Ray Charles *(Musician with Disabilities)*
Frederick Delius *(Composer with Disabilities)*
Landini Delius *(Composer with Disabilities)*
George Bridgetower *(African American Composer)*
William Grant Still *(African American Composer)*
Margaret Bond *(African American Composer)*
Pyotr Ilyich Tchaikovsky *(LBGTQ Composer)*
Jean-Baptiste *(LBGTQ Composer)*
Arcangelo Corelli *(LBGTQ Composer)*

Arts Education and Social and Emotional Learning Framework Connections

Artistic Process	SEL Competency	Enduring Understanding	Essential Questions
Create	**Self Awareness**	One's feelings, thoughts, personal traits, strengths and challenges influence the creative process.	How does the awareness of one's strengths, challenges, feelings, and thoughts influence the generation of creative ideas?
Create	**Self-Management**	Artists recognize the skills needed to generate, refine and complete creative ideas in order to achieve their goals	How do artists balance what is known with what is discovered during the creative process?
Perform/ Produce/	**Social Awareness**	Artists consider a variety of viewpoints and make	How does social awareness influence the

Present		choices about the selection and performance/ presentation/production of artistic works by considering cultural, historical, and social perspectives of the intended audience.	criteria that artists use to select, prepare and present/perform/ produce artistic works?
Perform/ Produce/ Present	**Relationship Skills**	The performance/presentation/ production of an artistic work is enhanced by seeking help from others.	How can an artist' s relationship with others impact the performance/presentation/ production of artistic works?
Respond	**Self Awareness**	Understanding an artist' s intent helps the viewer relate their own thoughts and feelings to artistic works.	How does the awareness of one's thoughts and feelings influence how a viewer responds to artistic works? How can responding to artistic works inform one's awareness of their thoughts and feelings?
Respond	**Responsible Decision-Making**	Artists consider the impact of critical thinking, and the perspective that is used to create an artistic work.	How does responding to an artistic work develop the capacity to evaluate and think critically?
Connect	**Self-Management**	Through engagement in the artistic process artists develop strategies for managing one ' s emotions, thoughts and behaviors.	How does engaging in the arts deepen our understanding of our own strategies for building perseverance, managing emotions, thoughts and behaviors?

Connect	**Social Awareness**	Artists create diverse & different artistic expressions synthesizing knowledge (personal, societal, cultural, and historic).	How does engaging in the arts help one identify their own thoughts, feelings and the perspectives of others?

Course Resources

1. New Jersey Arts Standards
2. SELARTS
3. Bandmate Chromatic Tuner
4. Tonal Energy Tuner
5. Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon
6. Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King
7. www.musictheory.net
8. www.rhythmrandomizer.com
9. www.noteflight.com
10. Compositions by Randall Standridge & Richard Saucedo
11. Compositions by Bright Sheng & Zhou Long Bun
12. Compositions by Heitor Villa-Lobos & Ernesto Lecuona
13. Compositions by Ludwig van Beethoven & Django Reinhardt
14. Compositions by George Bridgetower & William Grant Still
15. Compositions by Pyotr Ilyich Tchaikovsky & Jean-Baptiste

Pacing Guide

Unit #	Unit Title	NJ Standards	Resources	Unit Duration
1	**Intonation**	1.3C.12nov.Pr5 1.3C.12int.Pr5 1.3C.12nov.Pr6	Bandmate Chromatic Tuner Tonal Energy Tuner Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King	September-Mid October

2	**Articulation**	1.3C.12nov.Cr1 1.3C.12nov.Cr2 1.3C.12nov.Pr4 1.3C.12nov.Pr6 1.3C.12prof.Cn11 1.3C.12prof.Cn11	Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King Compositions by Randall Standridge & Richard Saucedo	Mid October-November
3	**Dynamics**	1.3C.12nov.Re7 1.3C.12nov.Re8 1.3C.12nov.Re9 1.3C.12prof.Cn10 1.3C.12prof.Cn11	Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King Compositions by Bright Sheng & Zhou Long Bun	December-January
4	**Music Theory**	1.3C.12nov.Pr4 1.3C.12nov.Pr6 1.3B.12prof.Re7 1.3C.12nov.Re8 1.3B.12prof.Re9 1.3C.12prof.Cn11	Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King www.musictheory.net Compositions by Heitor Villa-Lobos & Ernesto Lecuona	February-March

5	**Rhythmic and Melodic Sight Reading**	1.3C.12int.Pr4 1.3C.12int.Pr5 1.3C.12int.Pr6 1.3C.12int.Re7	Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King www.rhythmrandomizer.com Compositions by Ludwig van Beethoven & Django Reinhardt	April
6	**Ensemble Playing**	1.3C.12prof.Pr5 1.3C.12prof.Pr6 1.3C.12prof.Re8 1.3C.12prof.Re9	Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King Compositions by George Bridgetower & William Grant Still	May
7	**Composition**	1.3C.12int.Cr1 1.3C.12int.Cr2 1.3C.12int.Cr3 1.3C.12int.Pr6 1.3C.12int.Re7	www.noteflight.com Compositions by Pyotr Ilyich Tchaikovsky & Jean-Baptiste	June

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Unit 1 - Intonation

Unit 1 Timeframe: September-Mid October

Unit 1 Overview:

Students will be introduced to the various ways to tune a band instrument and a band as a whole. They will be able to tune using an electronic tuner app, tune to an emitted pitch, and tune to another player's instrument in the band. They will also be able to tune intervals within a chord, using their ears and comparing to an electronic instrument.

Resources

1. New Jersey Arts Standards
2. SELARTS
3. Bandmate Chromatic Tuner
4. Tonal Energy Tuner
5. Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon
6. Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King
7. Electronic keyboard
8. Pitch pipe

Essential Questions

- How do musicians improve the quality of their performance?
- When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?

Enduring Understandings

- To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.

Exemplar Unit Objectives

- Students will be able to tune their instrument by ear, by referring to an electric tuner, after listening to an example pitch.
- Students will be able to tune their instrument, by looking at an electronic tuner, after adjusting mouthpiece in or out for sharpness or flatness

Integration of Computer Science and Design Thinking

- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product

Standards Addressed

Artistic Process	Anchor Standards	Codes	Standards
Performing	Anchor Standard 5: Developing and refining techniques and models or steps	1.3C.12nov.Pr5	a. Use self-reflection and peer feedback to refine individual and ensemble performances of a varied repertoire of music.

	needed to create products.	1.3C.12int.Pr5	a. Develop strategies to address technical challenges in a varied repertoire of music and evaluate their success using feedback from ensemble peers and other sources to refine performances.
Performing	Anchor Standard 6: Conveying meaning through art	1.3C.12nov.Pr6	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music. b. Demonstrate an awareness of the context of the music through prepared and improvised performances.

Differentiation

- **Special Education Students**
  - Group assignments
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
  - Skill modification allowance or alternate assessment
- **English Language Learners**
  - Translated instructions
  - Video tutorials
- **504 Students**
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
- **Skills Fragile Students**
  - Alternative assessment
  - Simplified assignments
- **Advanced Students**
  - Extra Credit Projects
  - Encourage students to use advanced production techniques

Assessments

- **Formative**
  - *Open-ended questions*
  - *Brainstorming*
  - *Class discussions*

    - *Self Assessments*
    - *Peer Assessments*
    - *Exit tickets*
- **Summative**
    - Students will test their ears by tuning with an electronic tuner and also based off of a root pitch. As they work, they will test the accuracy of each method by using the other.
    - Students will be tested to fix their tuning by ear. This will be confirmed by an electronic tuner that they are not looking at.

Career Ready Practices

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6**. Demonstrate creativity and innovation.
- **CRP7**. Employ valid and reliable research strategies.
- **CRP8**. Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP10**. Plan education and career paths aligned to personal goals.
- **CRP11**. Use technology to enhance productivity.

21st Century Skills

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Perseverance
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Self-direction
- Innovation skills
- Thinking skills
- Flexibility
- Initiative
- Productivity

Interdisciplinary Connections

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.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

Mathematics

- MA.A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- MA.A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
- MA.A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
- MA.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
- MA.F-IF.B.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.
- MA.F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
- MA.F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- MA.F-IF.C.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
- MA.F-LE.A.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

Physics

- SCI.HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
- SCI.HS-PS3-5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.

- SCI.HS-PS4-1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.
- SCI.HS-PS4-2 Evaluate questions about the advantages of using a digital transmission and storage of information.
- SCI.HS-PS4-4 Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter.
- SCI.HS-PS4-5 Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

Unit 2 - Articulation

Unit 2 Timeframe: Mid-October through November

Unit 2 Overview:

Students will be able to identify articulation markings and apply them in performance of concert repertoire. This includes staccato (detached), accents (more aggressive note attack with a trapezoidal release), legato (smooth), marcato (detached and accented, and tenuto (full value). Note attack with "da" and "ta" will be discussed for different effects, as well as double and triple tonguing (t-ka and d-ga) for faster articulation.

Resources

1. New Jersey Arts Standards
2. SELARTS
3. Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon
4. Foundations for Superior Performance: Warm-Ups & Technique for Band
5. By Richard Williams & Jeff King
6. Notion Software
7. Ricoh Board
8. Compositions by *Randall Standridge & Richard Saucedo*

Essential Questions

- How do musicians generate creative ideas?
- How do musicians make creative decisions?
- How do performers select repertoire?
- When is a performance 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?

Enduring Understandings

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.

Exemplar Unit Objectives

- Students will be able to perform musical passages using a marcato articulation,by referring to "Note Shape" sheet music, after teacher demonstration
- Students will be able to perform musical passages using a legato articulation,by referring to "Note Shape" sheet music, after teacher demonstration

Integration of Computer Science and Design Thinking

- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product

Standards Addressed

Artistic Process	Anchor Standards	Codes	Standards
Creating	Anchor Standard 1: Generating and conceptualizing ideas.	1.3C.12nov.Cr1	a. Compose and improvise ideas and motives for melodies and rhythmic passages based on characteristic(s) of music or text(s) studied in rehearsal.
Creating	Anchor Standard 2: Organizing and developing ideas.	1.3C.12nov.Cr2	a. Select and develop draft melodic and rhythmic ideas or motives that demonstrate understanding of characteristic(s) of music or text(s) studied in

			rehearsal.
Performing	Anchor Standard 4: Selecting, analyzing, and interpreting work.	1.3C.12nov.Pr4	c. Identify expressive qualities in a varied repertoire of music that can be demonstrated through prepared and improvised performances.
Performing	Anchor Standard 6: Conveying meaning through art.	1.3C.12nov.Pr6	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music.
Connecting	Anchor Standard 10: Synthesizing and relating knowledge and personal experiences to create products.	1.3C.12prof.Cn11	a. Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing, and responding to music.
Connecting	Anchor Standard 11: Relating artistic ideas and works within societal, cultural, and historical contexts to deepen understanding.	1.3C.12prof.Cn11	a. Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

Differentiation

- **Special Education Students**
  - Group assignments
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
  - Skill modification allowance or alternate assessment
- **English Language Learners**
  - Translated instructions
  - Video tutorials
- **504 Students**
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
- **Skills Fragile Students**
  - Alternative assessment
  - Simplified assignments
- **Advanced Students**
  - Extra Credit Projects
  - Encourage students to use advanced production techniques

Assessments

- **Formative**
    - *Open-ended questions*
    - *Brainstorming*
    - *Class discussions*
    - *Self Assessments*
    - *Peer Assessments*
    - *Exit tickets*
- **Summative**
    - Students will be assessed on tongue technique and note length and shape
    - Students will be asked to play a passage in all different articulation styles

Career Ready Practices

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6**. Demonstrate creativity and innovation.
- **CRP7**. Employ valid and reliable research strategies.
- **CRP8**. Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP10**. Plan education and career paths aligned to personal goals.
- **CRP11**. Use technology to enhance productivity.

21st Century Skills

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Perseverance
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Self-direction
- Innovation skills
- Thinking skills
- Flexibility
- Initiative
- Productivity

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those 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.3: Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

ELA

- LA.RL.9-10.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).
- 09-10.RH.05 Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.
- 11-12.SL.01.D Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.

Mathematics

- MA.A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- MA.A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
- MA.A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
- MA.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
- MA.F-IF.B.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.

- MA.F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
- MA.F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- MA.F-IF.C.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
- MA.F-LE.A.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

Physics

- SCI.HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
- SCI.HS-PS3-5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.
- SCI.HS-PS4-1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.
- SCI.HS-PS4-2 Evaluate questions about the advantages of using a digital transmission and storage of information.
- SCI.HS-PS4-4 Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter.
- SCI.HS-PS4-5 Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

Unit 3 - Dynamics

Unit 3 Timeframe: December-January

Unit 3 Overview:

During this unit, students will learn to identify dynamic markings and interpret them as they play repertoire and sight read pieces they have never seen before. Students will listen to recordings of various genres of music and write and describe the dynamic changes, using academic terms such as piano, forte, crescendo, decrescendo, sforzando, etc. They will discuss the sorts of effects that are created by these changes in volume and melodic phrasing and how they add expressive complexity to the music.

Resources

1. New Jersey Arts Standards
2. SELARTS

3. Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon
4. Foundations for Superior Performance: Warm-Ups & Technique for Band
5. By Richard Williams & Jeff King
6. Notion Software
7. Ricoh Board
8. Compositions by *Bright Sheng & Zhou Long Bun*

Essential Questions

- How do individuals choose music to experience? How does understanding the structure and context of music inform a response?
- How do we discern the musical creators' and performers' expressive intent?
- How do we judge the quality of musical work(s) and performance(s)?
- 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?

Enduring Understandings

- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes. Response to music is informed by analyzing context (i.e., social, cultural, historical) and how creator(s) or performer(s) manipulate the elements of music.
- Through their use of elements and structures of music, creators and performers.
- The personal evaluation of musical work(s) and performance(s) is informed by analysis, interpretation, and established criteria.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.

Exemplar Unit Objectives

- Students will be able to perform musical passages using a piano dynamic, by referring to "Dynamics" sheet music, after teacher demonstration
- Students will be able to perform musical passages using a crescendo dynamic, by referring to "Dynamics" sheet music, after teacher demonstration

Integration of Computer Science and Design Thinking

- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product

Standards Addressed

Artistic Process	Anchor Standards	Codes	Standards

Responding	Anchor Standard 7: Perceiving and analyzing products	1.3C.12nov.Re7	a. Identify reasons for selecting music based on characteristics found in the music, connection to interest, and purpose or context. b. Identify how knowledge of context and the use of repetition, similarities, and contrasts inform the response to music.
Responding	Anchor Standard 8: Interpreting intent and meaning.	1.3C.12nov.Re8	a. Identify interpretations of the expressive intent and meaning of musical works, referring to the elements of music, contexts, and the setting of the text (when appropriate).
Responding	Anchor Standard 9: Applying criteria to evaluate products.	1.3C.12nov.Re9	a. Identify and describe the effect of interest, experience, analysis, and context on the evaluation of music.
Connecting	Anchor Standard 10: Synthesizing and relating knowledge and personal experiences to create products.	1.3C.12prof.Cn10	a. Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing, and responding to music.
Connecting	Anchor Standard 11: Relating artistic ideas and works within societal, cultural, and historical contexts to deepen understanding.	1.3C.12prof.Cn11	a. Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

Differentiation

- **Special Education Students**

    - Group assignments
    - Extended time for revisions
    - Opportunity to identify and develop areas of personal interest
    - Skill modification allowance or alternate assessment
- **English Language Learners**
    - Translated instructions
    - Video tutorials
- **504 Students**
    - Extended time for revisions
    - Opportunity to identify and develop areas of personal interest
- **Skills Fragile Students**
    - Alternative assessment
    - Simplified assignments
- **Advanced Students**
    - Extra Credit Projects
    - Encourage students to use advanced production techniques

Assessments

- **Formative**
    - *Open-ended questions*
    - *Brainstorming*
    - *Class discussions*
    - *Self Assessments*
    - *Peer Assessments*
    - *Exit tickets*.
- **Summative**
    - Students will be asked to perform various dynamics and will be offered feedback on how to steady the sound and get more dramatic effects
    - Students will be asked to perform various dynamics and be graded on overall effect and contrast

Career Ready Practices

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6**. Demonstrate creativity and innovation.
- **CRP7**. Employ valid and reliable research strategies.
- **CRP8**. Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP10**. Plan education and career paths aligned to personal goals.
- **CRP11**. Use technology to enhance productivity.

21st Century Skills

- Critical thinking
- Communication skills
- Creativity
- Problem solving

- Perseverance
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Self-direction
- Innovation skills
- Thinking skills
- Flexibility
- Initiative
- Productivity

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those 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.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

Mathematics

- MA.A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- MA.A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
- MA.A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

- MA.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
- MA.F-IF.B.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.
- MA.F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
- MA.F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- MA.F-IF.C.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
- MA.F-LE.A.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

Physics

- SCI.HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
- SCI.HS-PS3-5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.
- SCI.HS-PS4-1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.
- SCI.HS-PS4-2 Evaluate questions about the advantages of using a digital transmission and storage of information.
- SCI.HS-PS4-4 Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter.
- SCI.HS-PS4-5 Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

Unit 4 - Music Theory

Unit 4 Timeframe: February-March

Unit 4 Overview:

Students will be introduced to the basic theories that underlie the music that they play. They will learn about how key signatures are generated using the circle of fifths. Students will learn why and how music is written for transposing instruments. Students will learn how major scales are created and how enharmonics are based off of a piano keyboard. Students will determine flat

key signatures based on removing the furthest right flat. Students will determine sharp keys by going up a half step from the furthest right sharp. They will also identify matching notes with transposing instruments and enharmonics based on the musical keyboard. Students will learn about chord progressions and how their instrumental part fits into the chord and how it leads to the next. They will also identify motifs and examine how they are used throughout pieces of music, repeated and developed as a song evolves.

Resources

1. New Jersey Arts Standards
2. SELARTS
3. www.musictheory.net
4. Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon
5. Foundations for Superior Performance: Warm-Ups & Technique for Band
6. By Richard Williams & Jeff King
7. Notion software,
8. Ricohboard
9. Compositions by *Heitor Villa-Lobos & Ernesto Lecuona*

Essential Questions

- How do performers select repertoire?
- When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?
- How do individuals choose music to experience? How does understanding the structure and context of music inform a response?
- How do we discern the musical creators' and performers' expressive intent?
- How do we judge the quality of musical work(s) and performance(s)?
- How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?

Enduring Understandings

- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes. Response to music is informed by analyzing context (i.e., social, cultural, historical) and how creator(s) or performer(s) manipulate the elements of music.
- Through their use of elements and structures of music, creators and performers.
- The personal evaluation of musical work(s) and performance(s) is informed by analysis, interpretation, and established criteria.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.

Exemplar Unit Objectives

- Students will be able to identify all 12 key signatures,by referring to circle of fifths visual aid, after discussing the order of sharps and flats
- Students will be able to construct a major chord, by referring to chord interval chart, after reviewing interval lengths with half steps

Integration of Computer Science and Design Thinking

- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product

Standards Addressed

Artistic Process	Anchor Standards	Codes	Standards
Performing	Anchor Standard 4: Selecting, analyzing, and interpreting work.	1.3C.12nov.Pr4	a. Select varied repertoire to study based on interest, music reading skills (where appropriate), an understanding of the structure of the music, context, and the technical skill of the individual or ensemble. b. Demonstrate, using music reading skills (where appropriate) how knowledge of formal aspects in musical works inform prepared or improvised performances. c. Identify expressive qualities in a varied repertoire of music that can be demonstrated through prepared and improvised performances.
Performing	Anchor Standard 6: Conveying meaning through art.	1.3C.12nov.Pr6	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music. b. Demonstrate an awareness of the context of the music through prepared and improvised performances

Responding	Anchor Standard 7: Perceiving and analyzing products.	1.3B.12prof.Re7	a. Apply teacher-provided criteria to select music that expresses a personal experience, mood, visual image, or storyline in simple forms (e.g., one-part, cyclical, binary), and describe the choices as models for composition. b. Analyze aurally and/or by reading the elements of music (including form) of musical works, relating them to style, mood, and context, and describe how the analysis provides models for personal growth as a composer, performer, and/or listener.
Responding	Anchor Standard 8: Interpreting intent and meaning.	1.3C.12nov.Re8	a. Identify interpretations of the expressive intent and meaning of musical works, referring to the elements of music, contexts, and the setting of the text (when appropriate).
Responding	Anchor Standard 9: Applying criteria to evaluate products.	1.3B.12prof.Re9	a. Describe the effectiveness of the technical and expressive aspects of selected music and performances, demonstrating an understanding of the fundamentals of music theory. b. Describe the way(s) in which critiquing others' work and receiving feedback from others can be applied in the personal creative process.
Connecting	Anchor Standard 11: Relating artistic ideas and works within societal, cultural, and historical contexts to deepen understanding.	1.3C.12prof.Cn11	a. Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life

Differentiation

- **Special Education Students**
  - Group assignments
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
  - Skill modification allowance or alternate assessment
- **English Language Learners**
  - Translated instructions
  - Video tutorials
- **504 Students**
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
- **Skills Fragile Students**
  - Alternative assessment
  - Simplified assignments
- **Advanced Students**
  - Extra Credit Projects
  - Encourage students to use advanced production techniques

Assessments

- **Formative**
  - *Open-ended questions*
  - *Brainstorming*
  - *Class discussions*
  - *Self Assessments*
  - *Peer Assessments*
  - *Exit tickets*
- **Summative**
  - Students will be quizzed on their chordal and intervallic knowledge as the unit progresses
  - Students will be able to analyze a piece of music with melody and chords, noting intervals and chord types, key signatures, etc

Career Ready Practices

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6**. Demonstrate creativity and innovation.
- **CRP7**. Employ valid and reliable research strategies.
- **CRP8**. Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP10**. Plan education and career paths aligned to personal goals.
- **CRP11**. Use technology to enhance productivity.

21st Century Skills

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Perseverance
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Self-direction
- Innovation skills
- Thinking skills
- Flexibility
- Initiative
- Productivity

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

- 9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those 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.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

Mathematics

- MA.A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- MA.A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
- MA.A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
- MA.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
- MA.F-IF.B.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.
- MA.F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
- MA.F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- MA.F-IF.C.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
- MA.F-LE.A.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

History

- 6.1.12.HICC.3.A Evaluate the role of religion, music, literature, and media in shaping contemporary American culture over different time periods.
- 6.1.12.HICC.8.C Identify the conditions that gave rise to the Harlem Renaissance and assess the impact of artists, writers, and musicians on American culture.
- 6.1.12.HICA.2.A Research multiple perspectives to explain the struggle to create an American identity.
- 6.1.12.HSE.14.A Explore the various ways women, racial and ethnic minorities, the LGBTQ community, and individuals with disabilities have contributed to the American economy, politics and society.
- 6.1.12.HSE.14.B Use a variety of sources from diverse perspective to analyze the social, economic and political contributions of marginalized and underrepresented groups and/or individuals.
- 6.1.12.HUP.13.A Determine the extent to which suburban living and television supported conformity and stereotyping during this time period, while new music, art, and literature acted as catalysts for the counterculture movement.
- 6.1.12.HUP.16.A Analyze the impact of American culture on other world cultures and determine the impact of social media on the dissemination of American culture.
- 6.2.12.ECGE.6.C Relate the rise of the Internet and social media to global economy.

- 6.2.12.HICC.5.D Assess the influence of television, the Internet, and other forms of electronic communication on the creation and diffusion of cultural and political information worldwide.
- SOC.6.1.12.B.3.a Assess the impact of Western settlement on the expansion of United States political boundaries.

Unit 5 - Rhythmic and Melodic Sight Reading

Unit 5 Timeframe: April

Unit 5 Overview:

In this unit students will learn strategies for reading unfamiliar rhythms at sight. Students will also learn strategies for reading and performing melodic lines. Strategies will include tapping feet with the beat and performing increasingly complex sight reading exercises. Students will be able to identify difficult passages & key signatures before playing through the exercises learned throughout this unit. This will overall improve their performance abilities as musicians.

Resources

1. New Jersey Arts Standards
2. SELARTS
3. Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon
4. Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King
5. www.rhythmrandomizer.com
6. Notion Software
7. Ricoh Board
8. Compositions by *Ludwig van Beethoven & Django Reinhardt*

Essential Questions

- How do performers select repertoire?
- How do musicians improve the quality of their performance?
- When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?
- How do individuals choose music to experience? How does understanding the structure and context of music inform a response?

Enduring Understandings

- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.
- Musicians judge performance based on criteria that vary across time, place, and

cultures. The context and how a work is presented influence the audience response.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes. Response to music is informed by analyzing context (i.e., social, cultural, historical) and how creator(s) or performer(s) manipulate the elements of music.

Exemplar Unit Objectives

- Students will be able to perform eighth and sixteenth note rhythms, by listening to metronome, after clapping the rhythm and tapping feet with the beat.
- Students will be able to perform dotted eighth, dotted quarter, and sixteenth note rhythms,by listening to metronome, after clapping the rhythm and tapping feet with the beat.

Integration of Computer Science and Design Thinking

- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product

Standards Addressed

Artistic Process	Anchor Standards	Codes	Standards
Performing	Anchor Standard 4: Selecting, analyzing, and interpreting work.	1.3C.12int.Pr4	b. Demonstrate, using music reading skills (where appropriate), how the setting and formal characteristics of musical works contribute to understanding the context of the music in prepared or improvised performances. c. Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.
Performing	Anchor Standard 5: Developing and refining techniques and models or steps needed to create products.	1.3C.12int.Pr5	a. Develop strategies to address technical challenges in a varied repertoire of music and evaluate their success using feedback from ensemble peers and other sources to refine performances.
Performing	Anchor Standard 6: Conveying meaning	1.3C.12int.Pr6	a. Demonstrate attention to technical accuracy and

	through art.		expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.
Responding	Anchor Standard 7: Perceiving and analyzing products.	1.3C.12int.Re7	b. Describe how understanding context and the way the elements of music are manipulated inform the response to music.

Differentiation

- **Special Education Students**
  - Group assignments
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
  - Skill modification allowance or alternate assessment
- **English Language Learners**
  - Translated instructions
  - Video tutorials
- **504 Students**
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
- **Skills Fragile Students**
  - Alternative assessment
  - Simplified assignments
- **Advanced Students**
  - Extra Credit Projects
  - Encourage students to use advanced production techniques

Assessments

- **Formative**
  - *Open-ended questions*
  - *Brainstorming*
  - *Class discussions*
  - *Self Assessments*
  - *Peer Assessments*
  - *Exit tickets*
- **Summative**
  - Students will be quizzed on sight reading individually and as a class.
  - Students will be quizzed alone on randomly generated rhythms

Career Ready Practices

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6**. Demonstrate creativity and innovation.
- **CRP7**. Employ valid and reliable research strategies.
- **CRP8**. Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP10**. Plan education and career paths aligned to personal goals.
- **CRP11**. Use technology to enhance productivity.

21st Century Skills

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Perseverance
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Self-direction
- Innovation skills
- Thinking skills
- Flexibility
- Initiative
- Productivity

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

- 9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those 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.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

Mathematics

- MA.A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- MA.A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
- MA.A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
- MA.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
- MA.F-IF.B.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.
- MA.F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
- MA.F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- MA.F-IF.C.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
- MA.F-LE.A.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

Unit 6 - Ensemble Playing

Unit 6 Timeframe: May

Unit 6 Overview:

In this unit, students will learn how to listen as they play, making sure they blend with the other instruments and allow the melody to be heard. They will learn to adjust intonation as they play, tuning their instrument to the others in the group as they hear themselves go sharp or flat. Students will make sure that they are observing articulation and dynamic markings as they play together. Activities include performing passages with little or no blend and then with a more adequate blend. They will then listen to recordings of themselves and assess them accurately through peer to peer feedback.

Resources

1. New Jersey Arts Standards
2. SELARTS
3. Habits of a Successful Musician: A Comprehensive Curriculum for Use During Fundamentals Time by Scott Rush & Rich Moon
4. Foundations for Superior Performance: Warm-Ups & Technique for Band By Richard Williams & Jeff King
5. Compositions by *George Bridgetower & William Grant Still*
6. Tonal Energy tuner app
7. Bandmate Chromatic Tuner app
8. Electronic keyboard
9. Pitch pipe

Essential Questions

- How do musicians improve the quality of their performance?
- When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?
- How do we discern the musical creators' and performers' expressive intent?
- How do we judge the quality of musical work(s) and performance(s)?

Enduring Understandings

- To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- Through their use of elements and structures of music, creators and performers.
- The personal evaluation of musical work(s) and performance(s) is informed by analysis, interpretation, and established criteria

Exemplar Unit Objectives

- Students will be able to play repertoire in tune, by referring to electronic tuner, after rehearsing sections together
- Students will be able to play repertoire in unison rhythm, by listening to metronome, after rehearsing sections together

Integration of Computer Science and Design Thinking

- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product

Standards Addressed

Artistic Process	Anchor Standards	Codes	Standards
Performing	Anchor Standard 5: Developing and refining techniques and models or steps needed to create products.	1.3C.12prof.Pr5	a. Develop strategies to address expressive challenges in a varied repertoire of music, and evaluate their success using feedback from ensemble peers and other sources to refine performances
Performing	Anchor Standard 6: Conveying meaning through art.	1.3C.12prof.Pr6	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres. b. Demonstrate an understanding of expressive intent by connecting with an audience through prepared and improvised performances.
Responding	Anchor Standard 8: Interpreting intent and meaning.	1.3C.12prof.Re8	a. Explain and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, the setting of the text (when appropriate), and personal research.
Responding	Anchor Standard 9: Applying criteria to evaluate products.	1.3C.12prof.Re9	a. Evaluate works and performances based on personally or collaboratively developed criteria, including analysis of the structure and context.

Differentiation

- **Special Education Students**
  - Group assignments
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
  - Skill modification allowance or alternate assessment
- **English Language Learners**
  - Translated instructions
  - Video tutorials
- **504 Students**
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
- **Skills Fragile Students**
  - Alternative assessment
  - Simplified assignments
- **Advanced Students**
  - Extra Credit Projects
  - Encourage students to use advanced production techniques

Assessments

- **Formative**
  - *Open-ended questions*
  - *Brainstorming*
  - *Class discussions*
  - *Self Assessments*
  - *Peer Assessments*
  - *Exit tickets*
- **Summative**
  - Student directors will troubleshoot difficult parts in repertoire and offer suggestions to fix it
  - Students will journal on the good and bad parts of their ensemble playing, offering suggestions to improve overall sound and blend

Career Ready Practices

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6**. Demonstrate creativity and innovation.
- **CRP7**. Employ valid and reliable research strategies.
- **CRP8**. Utilize critical thinking to make sense of problems and persevere in solving them.
- **CRP10**. Plan education and career paths aligned to personal goals.
- **CRP11**. Use technology to enhance productivity.

21st Century Skills

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Perseverance
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Self-direction
- Innovation skills
- Thinking skills
- Flexibility
- Initiative
- Productivity

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

- 9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those 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.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.

- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

Mathematics

- MA.A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- MA.A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
- MA.A-REI.A.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
- MA.F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
- MA.F-IF.B.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.
- MA.F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
- MA.F-IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- MA.F-IF.C.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.
- MA.F-LE.A.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

Physics

- SCI.HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
- SCI.HS-PS3-5 Develop and use a model of two objects interacting through electric or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.
- SCI.HS-PS4-1 Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.
- SCI.HS-PS4-2 Evaluate questions about the advantages of using a digital transmission and storage of information.
- SCI.HS-PS4-4 Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter.
- SCI.HS-PS4-5 Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

History

- 6.1.12.HICC.3.A Evaluate the role of religion, music, literature, and media in shaping contemporary American culture over different time periods.
- 6.1.12.HICC.8.C Identify the conditions that gave rise to the Harlem Renaissance and assess the impact of artists, writers, and musicians on American culture.
- 6.1.12.HICA.2.A Research multiple perspectives to explain the struggle to create an American identity.
- 6.1.12.HSE.14.A Explore the various ways women, racial and ethnic minorities, the LGBTQ community, and individuals with disabilities have contributed to the American economy, politics and society.
- 6.1.12.HSE.14.B Use a variety of sources from diverse perspective to analyze the social, economic and political contributions of marginalized and underrepresented groups and/or individuals.
- 6.1.12.HUP.13.A Determine the extent to which suburban living and television supported conformity and stereotyping during this time period, while new music, art, and literature acted as catalysts for the counterculture movement.
- 6.1.12.HUP.16.A Analyze the impact of American culture on other world cultures and determine the impact of social media on the dissemination of American culture.
- 6.2.12.ECGE.6.C Relate the rise of the Internet and social media to global economy.
- 6.2.12.HICC.5.D Assess the influence of television, the Internet, and other forms of electronic communication on the creation and diffusion of cultural and political information worldwide.
- SOC.6.1.12.B.3.a Assess the impact of Western settlement on the expansion of United States political boundaries.

ELA

- LA.RL.9-10.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).
- 09-10.RH.05 Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.
- 11-12.SL.01.D Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.

Unit 7 - Composition

Unit 7 Timeframe: June

Unit 7 Overview:
In this unit, students will learn how to compose music for solo instruments and small ensembles. They will start with 4 bar phrases and work up to compositions of up to 32 bars. Original work will feature repeated motifs, have forms such as AB, sonata, rondo, and ABABC form. Students will also experiment with more amorphous structures, compositions to short videos, and compositions based on found sounds.

Resources

1. New Jersey Arts Standards
2. SELARTS
3. www.noteflight.com
4. Compositions by *Pyotr Ilyich Tchaikovsky & Jean-Baptiste*
5. Ricoh Board
6. Notion software

Essential Questions

- How do musicians generate creative ideas?
- How do musicians make creative decisions?
- How do musicians improve the quality of their creative work?
- When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?
- How do individuals choose music to experience? How does understanding the structure and context of music inform a response?

Enduring Understandings

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes. Response to music is informed by analyzing context (i.e., social, cultural, historical) and how creator(s) or performer(s) manipulate the elements of music

Exemplar Unit Objectives

- Students will be able to compose a 16 bar melody in ABA form, by referring to composition guidelines, after reviewing teacher's example
- Students will be able to compose a 32 bar melody in rondo form, by referring to composition guidelines, after reviewing teacher's example

Integration of Computer Science and Design Thinking

- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product

Standards Addressed

Artistic Process	Anchor Standards	Codes	Standards
Creating	Anchor Standard 1: Generating and conceptualizing ideas.	1.3C.12int.Cr1	a. Compose and improvise ideas and motives for melodies and rhythmic passages based on characteristic(s) of music or text(s) studied in rehearsal.
Creating	Anchor Standard 2: Organizing and developing ideas.	1.3C.12int.Cr2	a. Select and develop draft melodies and rhythmic passages that demonstrate understanding of characteristic(s) of music or text(s) studied in rehearsal.
Creating	Anchor Standard 3: Refining and completing products.	1.3C.12int.Cr3	a. Evaluate and refine draft compositions and improvisations based on knowledge, skill, and collaboratively developed criteria. b. Share personally developed melodies and rhythmic passages (individually or as an ensemble) that demonstrate understanding of characteristics of music or texts studied in rehearsal.
Performing	Anchor Standard 6: Conveying meaning through art.	1.3C.12int.Pr6	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles. b. Demonstrate an understanding of the context of the music through prepared and improvised performances
Responding	Anchor Standard 7: Perceiving and	1.3C.12int.Re7	b. Describe how understanding context and the way the elements

	analyzing products.		of music are manipulated inform the response to music.

Differentiation

- **Special Education Students**
  - Group assignments
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
  - Skill modification allowance or alternate assessment
- **English Language Learners**
  - Translated instructions
  - Video tutorials
- **504 Students**
  - Extended time for revisions
  - Opportunity to identify and develop areas of personal interest
- **Skills Fragile Students**
  - Alternative assessment
  - Simplified assignments
- **Advanced Students**
  - Extra Credit Projects
  - Encourage students to use advanced production techniques

Assessments

- **Formative**
  - *Open-ended questions*
  - *Brainstorming*
  - *Class discussions*
  - *Self Assessments*
  - *Peer Assessments*
  - *Exit tickets*
- **Summative**
  - Students will have multi-day compositions reviewed to improve melodies and harmonic backing
  - Students will peer review each others' compositions at the end and grade them based on the compositional rubric

Career Ready Practices

- **CRP2.** Apply appropriate academic and technical skills.
- **CRP4.** Communicate clearly and effectively and with reason.
- **CRP6**. Demonstrate creativity and innovation.
- **CRP7**. Employ valid and reliable research strategies.
- **CRP8**. Utilize critical thinking to make sense of problems and persevere in solving them.

- **CRP10**. Plan education and career paths aligned to personal goals.
- **CRP11**. Use technology to enhance productivity.

21st Century Skills

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Perseverance
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Self-direction
- Innovation skills
- Thinking skills
- Flexibility
- Initiative
- Productivity

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

- 9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
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- 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).
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- LA.W.9-10.6 Use technology, including the Internet, to produce, share, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
- LA.SL.9-10.1.B Collaborate with peers to set rules for discussions (e.g., informal consensus, taking votes on key issues, presentation of alternate views); develop clear goals and assessment criteria (e.g., student developed rubric) and assign individual roles as needed.
- LA.SL.9-10.1.C Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.
- LA.SL.9-10.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance findings, reasoning, and evidence and to add interest.
- 09-10.RH.05 Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.
- 11-12.W.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Mathematics

- MA.A-CED.A.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- MA.A-CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
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