Music Curriculum

Music Workplace Experience
Course Description

Music production careers are always highly sought-after. In order to be successful in this highly competitive arena, students will need the necessary technical and creative skills to be viewed as a professional, or to be accepted into a degree program in recording technology. Music Workplace Experience will create a foundation in music theory, recording technology, MIDI technology, and music business, in order to prepare student for technical jobs in the music industry.
## Pacing Chart

<table>
<thead>
<tr>
<th>Unit</th>
<th>Topics</th>
<th>Duration</th>
<th>Objectives</th>
</tr>
</thead>
</table>
| **Unit 1** | Bars, Measures, Beats | 8 weeks | 1.1 The Creative Process All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.  
1.3 Performance All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art. |
|       | Symbols of Written Music. |       |            |
|       | Understanding the Keyboard. |       |            |
|       | Physics of Music |       |            |
|       | Acoustics |       |            |
| **Unit 2** | Major Scales | 8 weeks | 1.1 The Creative Process All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.  
1.3 Performance All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art. |
|       | Chords |       |            |
|       | Melody |       |            |
|       | Harmony |       |            |
| **Unit 3** | Horns / Woodwinds | 8 weeks | 1.1 The Creative Process All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.  
1.3 Performance All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art. |
<p>|       | Melodic Percussion |       |            |</p>
<table>
<thead>
<tr>
<th>Synthesizers</th>
<th>1.3 Performance All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixing</td>
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<tr>
<td><strong>Unit 4</strong></td>
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<tr>
<td>Genres/World Music</td>
<td>8 Weeks</td>
</tr>
<tr>
<td>Remixing</td>
<td>1.1 The Creative Process All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.</td>
</tr>
<tr>
<td>Music Law</td>
<td>1.2 History of the Arts and Culture All students will understand the role, development, and influence of the arts throughout history and across cultures.</td>
</tr>
<tr>
<td>Music Business</td>
<td>1.3 Performance All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.</td>
</tr>
<tr>
<td></td>
<td>1.4 Aesthetic Responses &amp; Critique Methodologies All students will demonstrate and apply an understanding of arts philosophies, judgment, and analysis to works of art in dance, music, theatre, and visual art.</td>
</tr>
</tbody>
</table>
Educational Technology Standards


- **Technology Operations and Concepts**
  - Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
  - Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.

- **Creativity and Innovation**
  - Apply previous content knowledge by creating and piloting a digital learning game or tutorial.

- **Communication and Collaboration**
  - Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

- **Digital Citizenship**
  - Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.
  - Evaluate consequences of unauthorized electronic access and disclosure, and on dissemination of personal information.
  - Compare and contrast policies on filtering and censorship both locally and globally.

- **Research and Information Literacy**
  - Produce a position statement about a real world problem by developing a systematic plan of investigation with peers and experts synthesizing information from multiple sources.

- **Critical Thinking, Problem Solving, Decision Making**
  - Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.
### Career Ready Practices

**Standards**

CRP1, CRP2, CRP3, CRP4, CRP5, CRP6, CRP7, CRP8, CRP9, CRP10, CRP11, CRP12

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**CRP1. Act as a responsible and contributing citizen and employee**

Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.

**CRP2. Apply appropriate academic and technical skills.**

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.

**CRP3. Attend to personal health and financial well-being.**

Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial wellbeing, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.

**CRP4. Communicate clearly and effectively and with reason.**

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others’ time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.
CRP5. Consider the environmental, social and economic impacts of decisions.
Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization.

CRP6. Demonstrate creativity and innovation.
Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.

CRP7. Employ valid and reliable research strategies.
Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.

CRP9. Model integrity, ethical leadership and effective management.
Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of
integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others’ action, attitudes and/or beliefs. They recognize the near-term and long-term effects that management’s actions and attitudes can have on productivity, morals and organizational culture.

**CRP10. Plan education and career paths aligned to personal goals.**
Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.

**CRP11. Use technology to enhance productivity.**
Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.

**CRP12. Work productively in teams while using cultural global competence.**
Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

## Differentiated Instruction

### Accommodate Based on Students Individual Needs: Strategies

<table>
<thead>
<tr>
<th><strong>Time/General</strong></th>
<th><strong>Processing</strong></th>
<th><strong>Comprehension</strong></th>
<th><strong>Recall</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra time for assigned tasks</td>
<td>Extra Response time</td>
<td>Precise step-by-step directions</td>
<td>Teacher-made checklist</td>
</tr>
<tr>
<td>Adjust length of assignment</td>
<td>Have students verbalize steps</td>
<td>Short manageable tasks</td>
<td>Use visual graphic organizers</td>
</tr>
<tr>
<td>Timeline with due dates for reports and projects</td>
<td>Repeat, clarify or reword directions</td>
<td>Brief and concrete directions</td>
<td>Reference resources to promote independence</td>
</tr>
<tr>
<td>Communication system between home and school</td>
<td>Mini-breaks between tasks</td>
<td>Provide immediate feedback</td>
<td>Visual and verbal reminders</td>
</tr>
<tr>
<td>Provide lecture notes/outline</td>
<td>Provide a warning for transitions</td>
<td>Small group instruction</td>
<td>Graphic organizers</td>
</tr>
<tr>
<td></td>
<td>Reading partners</td>
<td>Emphasize multi-sensory learning</td>
<td></td>
</tr>
</tbody>
</table>

### Assistive Technology

- Computer/whiteboard
- Tape recorder
- Spell-checker
- Audio-taped books

### Tests/Quizzes/Grading

- Extended time
- Study guides
- Shortened tests
- Read directions aloud

### Behavior/Attention

- Consistent daily structured routine
- Simple and clear classroom rules
- Frequent feedback

### Organization

- Individual daily planner
- Display a written agenda
- Note-taking assistance
- Color code materials
Enrichment

Accommodate Based on Students individual Needs: Strategies

- Adaptation of Material and Requirements
- Evaluate Vocabulary
- Elevated Design
- Additional Projects
- Independent Student Options
- Projects completed individual or with Partners
- Self Selection of Research
- Tiered/Multilevel Activities
- Learning Centers
- Individual Response Board
- Open-ended activities
- Community/Subject expert mentorships
Assessments

Suggested Formative/Summative Classroom Assessments

- Timelines, Maps, Charts, Graphic Organizers
- Chapter Assessments, Quizzes
- Short Answer
- Accountable Talk, Debate, Oral Report, Role Playing, Think Pair, and Share
- Projects, Portfolio, Presentations, Prezi, Gallery Walks
- Homework
- Concept Mapping
- Photo, Video, Radio, Music and Sound Analysis
- Create an Original Music and Song, Film, or Poem
- Tumblr to create a Blog
New Jersey Core Curriculum Content Standards (NJCCCS):

- **1.1.12.B.1**

**Content Statement:** Understanding nuanced stylistic differences among various genres of music is a component of musical fluency. Meter, rhythm, tonality, and harmonics are determining factors in the categorization of musical genres.

**Cumulative Progress Indicator:** Examine how aspects of meter, rhythm, tonality, intervals, chords, and harmonic progressions are organized and manipulated to establish unity and variety in genres of musical compositions.

- **1.1.12.B.2**

**Content Statement:** Musical proficiency is characterized by the ability to sight-read advanced notation. Musical fluency is also characterized by the ability to classify and replicate the stylistic differences in music of varying traditions.

**Cumulative Progress Indicator:** Synthesize knowledge of the elements of music in the deconstruction and performance of complex musical scores from diverse cultural contexts.

- **1.2.12.A.1**

**Content Statement:** Cultural and historical events impact art-making as well as how audiences respond to works of art.

**Cumulative Progress Indicator:** Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.

- **1.2.12.A.2**

**Content Statement:** Access to the arts has a positive influence on the quality of an individual’s lifelong learning, personal expression, and contributions to community and global citizenship.

**Cumulative Progress Indicator:** Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.

**Cumulative Progress Indicator:** Analyze compositions from different world cultures and genres with respect to technique, musicality, and stylistic nuance, and/or perform excerpts with technical accuracy, appropriate musicality, and the relevant stylistic nuance.

- **1.3.12.B.2**

**Content Statement:** The ability to read and interpret music impacts musical fluency.

**Cumulative Progress Indicator:** Analyze how the elements of music are manipulated in original or prepared musical scores.

- **1.3.12.B.3**

**Content Statement:** Understanding of how to manipulate the elements of music is a contributing factor to musical artistry.
**Cumulative Progress Indicator:** Improvise works through the conscious manipulation of the elements of music, using a variety of traditional and nontraditional sound sources, including electronic sound-generating equipment and music generation programs.

- 1.3.12.B.4

**Content Statement:** Basic vocal and instrumental arranging skills require theoretical understanding of music composition.

**Cumulative Progress Indicator:** Arrange simple pieces for voice or instrument using a variety of traditional and nontraditional sound sources or electronic media, and/or analyze prepared scores using music composition software.

- 1.4.12.A.1

**Content Statement:** Recognition of fundamental elements within various arts disciplines (dance, music, theatre, and visual art) is dependent on the ability to decipher cultural implications embedded in artworks.

**Cumulative Progress Indicator:** Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.

- 1.4.12.A.2

**Content Statement:** Contextual clues within artworks often reveal artistic intent, enabling the viewer to hypothesize the artist’s concept.

**Cumulative Progress Indicator:** Speculate on the artist’s intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.

- 1.4.12.A.3

**Content Statement:** Artistic styles, trends, movements, and historical responses to various genres of art evolve over time.

**Cumulative Progress Indicator:** Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.

- 1.4.12.A.4

**Content Statement:** Criteria for assessing the historical significance, craftsmanship, cultural context, and originality of art are often expressed in qualitative, discipline-specific arts terminology.
**Cumulative Progress Indicator:** Evaluate how exposure to various cultures influences individual, emotional, intellectual, and kinesthetic responses to artwork.

- **1.4.12.B.1**

**Content Statement:** Archetypal subject matter exists in all cultures and is embodied in the formal and informal aspects of art.

**Cumulative Progress Indicator:** Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.

- **1.4.12.B.2**

**Content Statement:** The cohesiveness of a work of art and its ability to communicate a theme or narrative can be directly affected by the artist’s technical proficiency as well as by the manner and physical context in which it is performed or shown.

**Cumulative Progress Indicator:** Evaluate how an artist’s technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.

- **1.4.12.B.3**

**Content Statement:** Art and art-making reflect and affect the role of technology in a global society.

**Cumulative Progress Indicator:** Determine the role of art and art making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.
Interdisciplinary Connections

Technical Development: this area has strong connections to **Biology** and **Anatomy**. Students will apply knowledge of the musculoskeletal systems of the body and how the different parts of the system affect their muscle and motor control in maintaining appropriate posture, as well as increasing dexterity in their fingers. The efficacy of the nervous system in transmitting and interpreting visual, kinetic, and aural information is also explored.

Repertoire: the study of repertoire corresponds to study in **Social Studies** and **English Language Arts**. The historical periods (i.e., Medieval, Renaissance, etc.) are characterized by and parallel to specific conventions in art and music. For example, the influence that religious institutions had on Europe in the Medieval period meant that most of the music that was written was sacred in nature, and based on scripture. In the Renaissance period, secular music based on literary texts began to emerge, gaining momentum in the Romantic period.

Steady beat, tempo, basic rhythms: music notation pertaining to rhythms is based in **Math**. The terminology (whole, half, quarter, eighth, etc.) describing the length of notes or rests directly mirrors those in fractions. The vocabulary used to denote tempo has its origins in **World Languages**, specifically Italian.

Listening and analysis/Critique: both of these areas require and reinforce the adept use of **English Language Arts** skills in speaking, reading and writing. There is a long tradition of music analysis and critique that is akin to literary criticism. For example, Robert Schumann, German Romantic composer, was also well known for his publications critiquing performances and compositions of his day, and in the present time, modern technology has enabled consumers to participate in tendering assessments of everything from books, movies and music to mundane items such as pens and paper.
<table>
<thead>
<tr>
<th>NJDOE Student Learning Objective</th>
<th>Essential Questions</th>
<th>Skills</th>
<th>Resources</th>
<th>Sample Activities</th>
</tr>
</thead>
</table>
| **Standard 1.1, 1.3**          | What is Sound? How does sound work?  
-How sound is measured  
-What waves of sound are  
-How to classify waves | Compare sounds from multiple sources and manipulate them using recording consoles.  
Identify specific sounds by their quality  
Group sounds by their EQ range.  
Operate basic Equalizer functions autonomously identifying parts of an audio console | Recording Connection supplemental videos:  
http://www.recordingconnection.com/courses/music-producing/ | Using an analog audio console, students will “separate” sound elements into different channels/tracks.  
Organization of sounds be based on:  
-Frequency (in Hz)  
-Amplitude  
-Effective console operation  
-Ability to accurately identify the controls on the audio console. |
| Students replicate experiments with sound that elevate the understanding of concepts.  
Students use spectrum analysis to help students visualize the idea of sound waves.  
Using 3-4 bandwidths, students create categories in which students can identify and group sounds  
Students analyze connections with science and sound. Students should understand the concept of time and distance. |
| Standard 1.1, 1.3 | How sound is perceived by the human ear? | - Identifying the locations of sound  
- Panning to create perceived space  
- Decide what ranges of sound create the optimal conditions  
Brain wave states: [http://synthesislearning.com](http://synthesislearning.com) |

Students will identify various with music production software platforms.  
Students analyze the anatomy of the inner ear and how “sound” happens in the brain.  
Students demonstrate concepts of Melody, Harmony, and Dissonance.  
Students demonstrate an understanding of how humans connect sound to emotion and how it can be used to improve well-being, or encourage a decline in well-being.  
Students discuss how sound effects the different aspects of daily life including but not limited to, entertainment, personal lives, and... |
| Standard 1.1, 1.3 | Demonstrating ability to recognize, and replicate the sound of multiple sound environments using analog controls on a mixing console. | What is the difference between sound and noise? What’s the difference between sound absorption and diffusion? How do you differentiate Reverberation compared to echo? How do you handle Acoustic Problems: resonance, flutter echoes, low frequency buildup? Identifying the locations of sound. Panning to create perceived space. Decide what ranges of sound create the optimal conditions. Determining how to elicit an emotional response from sound. - Recording Connection supplemental videos: [http://www.recordingconnection.com/courses/music-producing/](http://www.recordingconnection.com/courses/music-producing/) Toldtekt educational video: [http://www.youtube.com/watch?v=--S6FPeJW60s](http://www.youtube.com/watch?v=--S6FPeJW60s) Creating a map of a room. Analyze the sound quality, create a treatment plan for optimizing the sound conditions. Students’ projects include: A perspective sketch of the chosen space. Labeling sources of acoustic problems. A written response stating the problems, and ways to correct them. -practical application of a solution either in part, or a completely implemented solution in groups. Labeling sources of acoustic problems. A written response stating the prob- | ng.com/article/brway.htm |
Students recognize what types of acoustic problems can ruin a performance.

Students create recordings of student performances to be uploaded in digital format so that waves can be analyzed visually in class.

Students will evaluate how vibration and resonance exist in nature.

Students will analyze waves and their respective frequencies.

Students identify wavelength, frequency, pitch from visual cues.

Students will demonstrate an understanding

How do you distinguishing timbres?
What are Fundamentals of Octaves, fifths, fourths, Major 3rd, Minor3rds used for?
How does Fundamental resonant frequency impact music?
What differences are found with Nodes and Antinodes?

How do you distinguishing timbres?
What are Fundamentals of Octaves, fifths, fourths, Major 3rd, Minor3rds used for?
How does Fundamental resonant frequency impact music?
What differences are found with Nodes and Antinodes?

Translate specific frequencies to music notes and create harmonics
Creating custom timbres through shaping of frequencies.
Finding fundamental frequencies.
Determining the pattern of major scales.

Williams College, Physics of Musical Instruments
http://www.youtube.com/watch?v=-D9UlPcJSRM&feature=endscreen
Physics of Music Notes:

Select 5 fundamental frequencies to create a chart of a harmonic scale using the mathematical pattern of the harmonic scale. Projects must include:
5 distinct fundamental frequencies
Harmonics to the seventh
Closest letter note equivalency
a digital representation of the scale
Students replicate experiments in class to establish a deeper un-
of how sound is perceived in the brain.

Examine connections with math and music. Students should understand the concept of time and distance.

<table>
<thead>
<tr>
<th>Standard 1.5 World Cultures, History, and Society</th>
<th>What is the piano and keyboard layout?</th>
<th>Ability to locate, navigate, and translate written notes to notes on the keyboard</th>
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<tbody>
<tr>
<td>Analyze the way notes are arranged and memorize these patterns.</td>
<td>How are Semitones, Steps and Half-Steps used?</td>
<td>- Identifying notes on the keyboard.</td>
</tr>
<tr>
<td>Students demonstrate an understanding of note names, and position.</td>
<td>Where are note patterns and octaves on a keyboard? What do they do?</td>
<td>- Working with steps and half-steps.</td>
</tr>
<tr>
<td>Evaluate the playing of notes together as a digital band</td>
<td>Investigate the use of both digital keyboards and real keyboards to reinforce the concepts.</td>
<td>- Learning the music notes in written music</td>
</tr>
<tr>
<td>Analyze connections</td>
<td>Building harmonic scales from resonant frequency.</td>
<td>- Reading Notes, About.com: Music Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="http://video.about.com/musiced/Note-Reading-Basics.htm">http://video.about.com/musiced/Note-Reading-Basics.htm</a></td>
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<tr>
<td></td>
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<td>WIKI HOW: How to learn keyboard notes.</td>
</tr>
<tr>
<td></td>
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<td><a href="http://www.wikihow.com/Learn-Keyboard-Notes">http://www.wikihow.com/Learn-Keyboard-Notes</a></td>
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<tr>
<td></td>
<td><a href="http://www.phy.mtu.edu/~suits/notefreqs.html">http://www.phy.mtu.edu/~suits/notefreqs.html</a></td>
<td>Students will have a performance assessment that requires students to play specific notes and patterns. The assessment with require students demonstrate understanding of the following:</td>
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<tr>
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<td>- multiple note locations</td>
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<td>- sight recognition of notes</td>
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<tr>
<td></td>
<td></td>
<td>- Values of steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Value of half steps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- octaves</td>
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<tr>
<td></td>
<td></td>
<td>- Students create maps for to identify the notes and other parts of a keyboard.</td>
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</tbody>
</table>
with math and music. Students should understand the concept of time and distance.
<table>
<thead>
<tr>
<th><strong>Standard 1.1, 1.3</strong></th>
<th><strong>What are sharps, flats, and naturals?</strong></th>
<th><strong>Recognize basic music symbols, notations, and read and write basic sheet music.</strong></th>
<th><strong>Students will create a small musical composition for one voice/instrument incorporating all of the symbols used in the unit. Compositions must include:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students analyze connections with math and music. Students should understand the concept of time and distance.</td>
<td>How are note values and relationships used?</td>
<td>Reading the symbols of written music.</td>
<td>- sharp notes</td>
</tr>
<tr>
<td>- Students translate short music selections into sheet music.</td>
<td>Why do you insert writing silence into sheet music?</td>
<td>Using fractions to construct melodies.</td>
<td>- flat or natural notes</td>
</tr>
<tr>
<td>Students understand music notation as a language.</td>
<td>How is notation of Sheet music used?</td>
<td>Composing simple and complex written music.</td>
<td>- time signature</td>
</tr>
<tr>
<td>Students develop sheet music using various notation in 4/4 time.</td>
<td>Investigate the use Measures, Bars, Beats, Notes, and Tempo as units of measurement.</td>
<td>Ability to hear notes and translate them into written compositions</td>
<td>- treble clef or bass clef</td>
</tr>
<tr>
<td>Recognize basic music symbols, notations, and read and write basic sheet music.</td>
<td>- Reading Notes, About.com: Music Education <a href="http://video.about.com/musiced/Note-Reading-Basics.htm">http://video.about.com/musiced/Note-Reading-Basics.htm</a></td>
<td>- rests</td>
<td>- 1/8 notes, ¼ notes, ½ notes, 1/1 (whole) notes</td>
</tr>
</tbody>
</table>
| Standard 1.1, 1.3 | How do you use loops?  
How do you counting beats and measures?  
What is common time versus Cut time?  
How is timing and the metronome used? | Recognizing time signatures  
Adding beats to create measures (bars)  
Developing internal timing using a metronome. | Students will create “on the fly” recordings with assistance of a metronome. Recordings must meet the following requirements:  
3 or more separate tracks of recorded music  
At least 1 percussion track  
MIDI events that are locked in sync and on time  
Students work in groups to create in class compositions.  
Students play notes together using music production software as a group.  
Ability to play and record live music using two time signatures. |
|---|---|---|---|
| Investigate the use analog or traditional instruments as aids in building the concept of rhythm and timing.  
Analyze connections between fractions and musical timing.  
Examine the use of Measures, Bars, Beats, Notes, and Tempo as units of measurement.  
Examine and identify basic time signatures. | - Reading Notes, About.com: Music Education  
http://video.about.com/musiced/Note-Reading-Basics.htm | - |
| **Standard 1.1, 1.3** | Analyze connections with math and music. Students should understand the concept of time and distance. Understand how to format and functions of digital music programs. Examine the use of shortcuts and helpful tools for quickly accessing program functions. Demonstrate an understanding of Measures, Bars, Beats, Notes, and Tempo as units of measurement. Demonstrate use of music editing software through various small projects. | What is Tempo, BPM, Metronome? How do artist use the Arrange window? Why do you transport panel options? How are loops and synth categories used? | Ability to use the basic functions of music production software to create compositions -Creating project files -Navigating basic functions of production software -Editing musical compositions using production software. | - Reading Notes, About.com: Music Education http://video.about.com/musiced/Note-Reading-Basics.htm | Students will use premade loops to create short composition to demonstrate proficiency using the interface of music production software. Compositions must demonstrate: - ability to browse loops in three ways - arrangement of multiple loops - functions within the transport panel knowledge of accessing and editing using the tools and windows of production software. |
| **Standard 1.1, 1.3** | What are the different aspects of the grid?  
What is scaling and step recording?  
What challenges are found with MIDI production?  
Where is Velocity and Value used? | Creating compositions using the step recording process with music production software. - Accessing the piano roll in production software  
- Adjusting the grid to match note values  
- Using MIDI production skills to compose music | - Reading Notes, About.com: Music Education  
http://video.about.com/因地/musiced/Note-Reading-Basics.htm  

Students will create a musical composition using a step-recording method within the piano roll. Projects will include:  
-MIDI events  
-multiple velocities  
-multiple note values  
-note alignment with the piano roll’s grid |
<table>
<thead>
<tr>
<th>Grade: 9th-12th</th>
<th>Unit: 2 (8 Weeks)</th>
<th>Topic: Major Scales</th>
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<tr>
<td>NJDOE Student Learning Objective</td>
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| **Standard 1.1, 1.3** | How do we define scales?  
How are notes in the “C” scale used?  
What are Major scale pattern?  
How are Root notes and replicating scales used? | Skills: Ability to produce scales from root notes, establishing a “key” for musical composition.  
-Determining the notes within a scale.  
-Building scales  
-Using scales to create melodies. |
| | Students will create a scale map with MIDI events representing the major scales. Maps will include:  
- sharp notes  
- flat or natural notes  
- 1/8 notes, ¼ notes, ½ notes, 1/1 (whole) notes  
- 6 major scales | Sample Activities |

- Reading Notes, About.com: Music Education  
http://video.about.com/musiced/Note-Reading-Basics.htm  
Major Scales  
http://musiced.about.com/od/lessonsandtips/qt/scales.htm
<table>
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<td><strong>Standard 1.1, 1.3</strong></td>
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<td>Students will use music production software to create a map of chord inversions and progressions. Maps must include:</td>
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<tr>
<td>Students identify patterns and systems in music theory.</td>
<td>What chord patterns used for?</td>
<td>Identify, build, and invert chords to create progressions.</td>
<td>- Reading Notes, About.com: Music Education <a href="http://video.about.com/musiced/Note-Reading-Basics.htm">http://video.about.com/musiced/Note-Reading-Basics.htm</a></td>
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<td>Demonstrate the playing of minor and major chords.</td>
<td>What are the differences between major chords and minor chords?</td>
<td></td>
<td>TRIADS: <a href="http://www.true-piano-lessons.com/keyboard-chords.html">http://www.true-piano-lessons.com/keyboard-chords.html</a></td>
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</tr>
<tr>
<td>Recognize the notes and chords of the compositions/recordings</td>
<td>How are triads and Inversion used?</td>
<td>- locating chords and playing them on a keyboard/piano</td>
<td>- All chords within the major scale</td>
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<td>- using a MIDI trigger to trigger notes</td>
<td>- All inversions of chords within that scale</td>
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<td>- learning which chords are in a scale</td>
<td>- Accurate timing of chords within the composition.</td>
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<td>Students will also have a written assessments of their knowledge of concepts.</td>
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<td><strong>Standard 1.1, 1.3</strong></td>
<td>Identify the composing methods used in contemporary music.</td>
<td>How is imitation used in musical pieces? How does retrograde differ from retrograde inversion? What is inversion and arpeggio? What type of challenges are seen with augmentation/dimination?</td>
<td>Skills: Use methods of creating melodies based on chord patterns. - learning how to create a melody from scales and chords - applying mathematical patterns to scales to create melody - using multiple note values in the composition process</td>
<td>Resources: Reading Notes, About.com: Music Education <a href="http://video.about.com/musiced/Note-Reading-Basics.htm">http://video.about.com/musiced/Note-Reading-Basics.htm</a> COMPOSITING MELODIES: <a href="http://www.mymusictheory.com/grade5/lessons/12-composing-a-melody-general-tips.html">http://www.mymusictheory.com/grade5/lessons/12-composing-a-melody-general-tips.html</a> WRITING MEMORABLE MELODIES: <a href="http://audio.tutsplus.com/tutorials/composition/seven-steps-to-writing-memorable-melodies-part-1/">http://audio.tutsplus.com/tutorials/composition/seven-steps-to-writing-memorable-melodies-part-1/</a></td>
</tr>
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<td>Demonstrate a use of multiple combinations of melody patterns to create original work.</td>
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<td>Analyze the playing of scales or chords on an actual keyboard.</td>
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<td>Examine the correlation of keyboard and the piano roll in the music editing software.</td>
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</table>
| **Standard 1.1, 1.3**            | How do voices and timbre impact music? What challenges are found in 3rd, 4th, 6th? | Training the ear to recognize harmonics and combining multiple timbres - using the piano roll to create 3rds, 4ths, 6ths - choosing a sound palette that is complimentary - recreating classical examples of harmonies - composing sheet music | - Reading Notes, About.com: Music Education [http://video.about.com/musiced/Note-Reading-Basics.htm](http://video.about.com/musiced/Note-Reading-Basics.htm)  
WRITING HARMONIES TO MAKE YOUR MUSIC COME ALIVE: [http://www.how-to-write-music.com/Harmonising.htm](http://www.how-to-write-music.com/Harmonising.htm) | Students will use pre-created melodies and compose harmonies to accompany them. Compositions will include:  
- Use of multiple octaves  
- Use of varied timbres  
- Accurate and quantized timing  
Multiple levels of complexity |
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<td><strong>Standard 1.1, 1.3</strong></td>
<td>How can you explain Drum voices / names? How do you use patterns? How does timing / tempo impact the composed piece? What is syncopation and fills?</td>
<td>Creating Drum sequences using multiple types of timing, rhythm, and syncopation. -using the piano roll grid and ruler to create “locked” or tight timing. -Adjusting notes to create realistic “feel” to drums -choosing drum kits to represent a certain period of time, style, or genre -using the metronome to test timing accuracy</td>
<td>CREATING REALISTIC SEQUENCED DRUM PARTS: <a href="http://www.soundonsound.com/sos/oct99/articles/20tips.htm">http://www.soundonsound.com/sos/oct99/articles/20tips.htm</a> DRUM PROGRAMMING SECRETS: <a href="http://www.youtube.com/watch?v=8AfTPBZg0Hc">http://www.youtube.com/watch?v=8AfTPBZg0Hc</a></td>
<td>Students will create a series of drum sequences using music production software. Drum sequences will include: - Multiple drum voices. - Quantized and syncopated patterns - Use of varied timing - drum fills - melody driven drum patterns</td>
</tr>
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<td>Students distinguish specific percussion instruments. Students demonstrate an understanding of composing percussion parts using piano roll grids. Analyze the use percussion to clearly accent the melody Create and compose percussion and bass parts together to create a digital rhythm section Understanding the number of beats, and how to deviate from the established pattern to create fills Students demonstrate different playing styles.</td>
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<td><strong>Standard 1.1, 1.3</strong></td>
<td>What are the different types of bass? How does walking bass differ from others? What is bass fills? How does bass relationship to melody and percussion differ?</td>
<td>Methods of creating base lines, and how they relate to a composition. --Adjusting notes to create realistic “feel” to base lines -choosing bass voices to represent a certain period of time, style, or genre. -using the piano roll grid and ruler to create “locked” or tight timing. - Creating / editing tools in music production software</td>
<td>- Reading Notes, About.com: Music Education <a href="http://video.about.com/musiced/Note-Reading-Basics.htm">http://video.about.com/musiced/Note-Reading-Basics.htm</a> Base Line Creation: <a href="http://www.cyberfreethass.com/line-creation/roots/index.php">http://www.cyberfreethass.com/line-creation/roots/index.php</a></td>
<td>Students will create bass lines to accompany compositions that they have already started. Base lines will include/demonstrate: -walking base lines -bass fills -bass lines that accent melodies -bass lines that accent percussion parts.</td>
</tr>
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<td>An understanding of the number of beats, and how to deviate from the established pattern to create bass fills.</td>
<td>Analyzing bass as a compliment to melody or percussion parts. Examining distinguish specific bass timbres/voices. Students demonstrate different playing styles.</td>
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<td><strong>Standard 1.1, 1.3</strong></td>
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<td>Students evaluate the use auditory and visual cues to determine whether guitar parts are in harmony with the rhythm parts of the sequence.</td>
<td>How do you identify acoustic sound quality? Why is electric sound quality unique? What is riffs in guitar playing? What is the difference between plucking and strumming? How does a lead guitar and rhythm guitar differ?</td>
<td>Using music production software to create lifelike compositions using voices of a synthesizer --Studying the history of the instrument and examples of playing style -adjusting velocity, cadence, pitch, and timing. -production methods to achieve desired effects: modulation, sustain, pitch-bending - Choosing combinations of synthesizers to create one voice.</td>
<td>History of Guitars <a href="http://en.wikipedia.org/wiki/Guitar">http://en.wikipedia.org/wiki/Guitar</a> Tips for realistic MIDI Sequencing <a href="http://www.soundonsound.com/sos/1997_articles/feb97/realmidi.html">http://www.soundonsound.com/sos/1997_articles/feb97/realmidi.html</a> Adding Realism to Synthesized Sequences <a href="http://ethanwiner.com_REALISM.html">http://ethanwiner.com_REALISM.html</a></td>
<td>Students will create 2 part guitar sequences to accompany drum patterns they have previously created. Sequences will include/demonstrate: - 4 measures - use of genre - multiple note values - multiple note names - use of scales and chords - varied velocities</td>
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<td>Students will analyze the number of beats, and how to deviate from the established pattern to create solos/improvisational parts.</td>
<td>Students distinguish specific guitar timbres/voices.</td>
<td>Students demonstrate different playing styles.</td>
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<td><strong>Standard 1.1, 1.3</strong>&lt;br&gt;Students demonstrate an understanding of use auditory and visual cues to determine whether string parts are in harmony with the lead voice.</td>
<td>What are the differences between violins, violas, and cellos?&lt;br&gt;How does an artist explain the use of bowing pizzicato?&lt;br&gt;How are string sections in orchestras used?&lt;br&gt;What is the difference between classical, folk, and modern?&lt;br&gt;Who are the influential players in strings?</td>
<td>Using music production software to create lifelike compositions using voices of a synthesizer&lt;br&gt;--Studying the history of the instrument and examples of playing style&lt;br&gt;- adjusting velocity, cadence, pitch, and timing.&lt;br&gt;-production methods to achieve desired effects: modulation, sustain, pitch-bending&lt;br&gt;- Choosing combinations of synthesizers to create one voice.</td>
<td>Tips for realistic MIDI Sequencing&lt;br&gt;<a href="http://www.soundonsound.com/sos/1997_articles/feb97/realmidi.html">http://www.soundonsound.com/sos/1997_articles/feb97/realmidi.html</a>&lt;br&gt;Adding Realism to Synthesized Sequences&lt;br&gt;<a href="http://ethanwiner.com/realism.html">http://ethanwiner.com/realism.html</a>&lt;br&gt;Realistic strings&lt;br&gt;<a href="http://www.youtube.com/watch?v=Ce989ZsUWuA">http://www.youtube.com/watch?v=Ce989ZsUWuA</a></td>
<td>Using MIDI production software, students will create 3 part string sequences to accompany drum patterns that they have previously created. Sequences will include/demonstrate:&lt;br&gt;- 4 measures&lt;br&gt;- use of genre&lt;br&gt;- multiple note values&lt;br&gt;- multiple note names&lt;br&gt;- use of scales and chords&lt;br&gt;- varied velocities</td>
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<td><strong>Standard 1.1, 1.3</strong></td>
<td>Examine the use auditory and visual cues to determine whether organ/electric piano parts are in harmony. Analyze the number of beats, and how to deviate from the established pattern to create solo/improvisational parts. Investigate the use of organ to play melody, harmony, and/or rhythm parts of a composition. Students distinguish specific organ/electric piano timbres/voices.</td>
<td>Using music production software to create lifelike compositions using voices of a synthesizer --Studying the history of the instrument and examples of playing style -adjusting velocity, cadence, pitch, and timing. -production methods to achieve desired effects: modulation, sustain, pitch-bending - Choosing combinations of synthesizers to create one voice.</td>
<td>Adding Realism to Synthesized Sequences <a href="http://ethanwiner.com/realism.html">http://ethanwiner.com/realism.html</a> History of Organs <a href="http://en.wikipedia.org/wiki/Organ_(music)">http://en.wikipedia.org/wiki/Organ_(music)</a> Whirlitzer <a href="http://en.wikipedia.org/wiki/Wurlitzer_electric_piano">http://en.wikipedia.org/wiki/Wurlitzer_electric_piano</a> Demo <a href="http://www.youtube.com/watch?v=vjdZOfOwlu4">http://www.youtube.com/watch?v=vjdZOfOwlu4</a> Examples <a href="http://www.youtube.com/watch?v=cZ9P4aIKjM">http://www.youtube.com/watch?v=cZ9P4aIKjM</a></td>
<td>Using music production software, students will create 2 part organ/Electric Piano sequences to accompany drum patterns that they have already creating. Sequences will include/demonstrate: - 4 measures - use of genre - multiple note values - multiple note names - use of scales and chords varied velocities</td>
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**Standard 1.1, 1.3**

Examine the use auditory and visual cues to determine whether melodic percussion parts are in harmony with the lead voice.

Demonstrate use of melodic percussion as both a lead voice and as an accent.

Identify specific melodic percussion timbres/voices.

| What are ways the marimba, vibraphone and xylophone are different? | Using music production software to create lifelike compositions using voices of a synthesizer |
| What are the different types of melodic percussions? | Using music production software, students will create 2 part melodic percussion sequences. Sequences will include/demonstrate: |
| Who are some of the melodic percussion influential players? | - 4 measures |
| | - use of genre |
| | - multiple note values |
| | - multiple note names |
| | - use of scales and chords |
| | - varied velocities |

Adding Realism to Synthesized Sequences
http://ethanwiner.com/realism.html

History and Playing Style
http://en.wikipedia.org/wiki/Vibraphone
http://en.wikipedia.org/wiki/Marimba
http://en.wikipedia.org/wiki/Steelpan
**Standard 1.1, 1.3**

Students use auditory and visual cues to determine whether lead synthesizer parts are in harmony with the lead voice.

Students demonstrate use of lead synthesizer as both a lead voice and as an accent.

Students distinguish specific lead synthesizer timbres/voices.

---

**Using music production software to create contemporary genres/styles using voices of a synthesizer.**

- Studying the history of the instrument and examples of playing style
- Adjusting velocity, cadence, pitch, and timing.
- Production methods to achieve desired effects: modulation, sustain, pitch-bending
- Choosing combinations of synthesizers to create one voice.

**Sound Shaping**

http://www.youtube.com/watch?v=Vx3fV7kLq44

**Electronic Music**

http://en.wikipedia.org/wiki/Electronic_music

**LFO**

http://www.youtube.com/watch?v=_LVqvqvm-0LU

**Examples**

http://www.youtube.com/watch?v=dHbimdLKCKk

http://www.youtube.com/watch?v=i-hAJcXqYms

http://www.youtube.com/watch?v=X00XdlhFLSg

Using music production software, students will create Lead Synthesizer sequences. Sequences will include/demonstrate:

- 8 measures
- Use of genre
- Multiple note values
- Multiple note names
- Use of scales and chords
- Varied velocities
**Standard 1.1, 1.3**

Students use auditory and visual cues to determine whether slow synthesizer parts are in harmony with the lead voice.

Students demonstrate use of slow synthesizer as both a lead voice and as an accent.

Students distinguish specific slow synthesizer timbres/voices.

<table>
<thead>
<tr>
<th>How would someone describe and implement modulation and attack times?</th>
<th>Using music production software to create contemporary genres/styles using voices of a synthesizer.</th>
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<tbody>
<tr>
<td>What are sweeping and oscillators?</td>
<td>--Studying the history of the instrument and examples of playing style</td>
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<tr>
<td>How is scoring used in Pads / Slow Synthesizers?</td>
<td>- adjusting velocity, cadence, pitch, and timing.</td>
</tr>
<tr>
<td></td>
<td>- production methods to achieve desired effects: modulation, sustain, pitch-bending</td>
</tr>
</tbody>
</table>
|  | Sound Shaping
|  | http://www.youtube.com/watch?v=Vx3fV7kLq44 |
|  | Electronic Music
|  | http://en.wikipedia.org/wiki/Electronic_music |
|  | LFO -
|  | http://www.youtube.com/watch?v=_LVqvqm-0LU |

Using music production software, students will create Pad / Slow Synthesizer sequences. Sequences will include/demonstrate:
- 8 measures
- use of genre
- multiple note values
- multiple note names
- use of scales and chords varied velocities

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- **Sound Shaping**
- **Electronic Music**
- **LFO** -
| **Standard 1.1, 1.3** | **How is a Equalizer range used in music?**<br>Determine what combination of synthesizers cover the EQ spectrum.<br>Analyze the use of insert effects on individual channels to edit each voice.<br>Distinguish specific synthesizer timbres/voices in music examples and recreate sound quality. | **Using music production software to create voices by blending various timbres.**<br>- MIDI controllers<br>- Choosing complimentary voices<br>- recreating industry synthesizers<br>- using spectrum analyzers to find ideal ranges. | **Sound Shaping**<br>http://www.youtube.com/watch?v=Vx3fV7kLq44<br><br>Electronic Music<br>http://en.wikipedia.org/wiki/Electronic_music<br>http://www.independentrecording.net/irn/resources/freqchart/main_display.htm | **Using music production software, students will create multi timbre voices to compose sequences. Sequences will include/demonstrate:**<br>- 8 measures<br>- use of genre<br>- multiple note values<br>- multiple note names<br>- use of scales and chords<br>- varied velocities |
**Standard 1.1, 1.3**

Demonstrate the use of auditory and visual cues to determine what volume levels are ideal for sound clarity.

Examine signal flow within a mixing window, or analog mixer.

Analyze the individual mixer channel controls.

Investigate dB, Sends, Inserts, Panning, Mute/Solo, Faders, Assignments, within a mix.

<table>
<thead>
<tr>
<th>What are volume, dBs, and velocity?</th>
<th>Using music production software to create master recordings</th>
</tr>
</thead>
<tbody>
<tr>
<td>How is panning used in mixing?</td>
<td>-- Studying the history of the mixing and examples of master mixes</td>
</tr>
<tr>
<td>What are the characteristics of automation in mixing?</td>
<td>- adjusting volume and panning</td>
</tr>
<tr>
<td>What are the challenges in mixing when associated with group/sub/bus tracks?</td>
<td>- creating automation on individual channels</td>
</tr>
<tr>
<td>How are equalizers used in mixing?</td>
<td>- Shaping sounds using EQ, removing, noise &amp; distortion</td>
</tr>
<tr>
<td></td>
<td>- Channel effects</td>
</tr>
</tbody>
</table>

Using music production software, students will use previously created loops, sequences and projects to produce a mix. Mixes will include/demonstrate:

- 8 tracks/channels
- use panning
- channel & master EQ
- 4 group tracks
- 2 insert effects
- automation
### Standard 1.1, 1.3

Students analyze traditional song formats, and then manipulate then to create original compositions.

Students distinguish various genres of music by its arrangement.

Students know the various editing tools involved in the arrangement process.

<table>
<thead>
<tr>
<th>How is chorus and hook developed?</th>
<th>Creating the multiple song parts, arranging single voices, and setting mood and movement through a composition.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What challenges are faced when creating a:</td>
<td>- Identifying different song parts</td>
</tr>
<tr>
<td>• Verse</td>
<td>- Learning the purpose of various song parts</td>
</tr>
<tr>
<td>• Chorus/Hook</td>
<td>- Composing using industry standard arrangement</td>
</tr>
<tr>
<td>• Bridge/Break</td>
<td>- Evoking specific emotional response</td>
</tr>
<tr>
<td>• Solo</td>
<td></td>
</tr>
<tr>
<td>• Outro/Adlib</td>
<td></td>
</tr>
</tbody>
</table>

Using music production software, students will create complete compositions with at least 80 measures which will include/demonstrate:

- 8 measure intro
- 8 measure outro
- 8 measure hook/chorus
- 16 measure verse (x2)
- 4-8 measure break, bridge, or solo
- 6 or more timbres
- automation

http://www.nytimes.com/1995/05/29/arts/dance-review-
Early Modern Dance: Martha Graham Night Journey -
r=0
<table>
<thead>
<tr>
<th>Standard 1.1, 1.3</th>
<th>What are different microphone types and what makes them different?</th>
<th>Setting up vocal recording sessions, capturing vocals, and editing of recorded vocals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How does the recording environment impact the recording?</td>
<td>- Setting up multiple microphone types for ideal recording</td>
</tr>
<tr>
<td></td>
<td>What is:</td>
<td>- analyzing and improving the recording environment</td>
</tr>
<tr>
<td></td>
<td>• windsock</td>
<td>- setting pre and post effects during vocal recording</td>
</tr>
<tr>
<td></td>
<td>• pop filters</td>
<td>- Audio mixing with vocals</td>
</tr>
<tr>
<td></td>
<td>• limiters</td>
<td>- Running a vocal recording session</td>
</tr>
<tr>
<td></td>
<td>• doubling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• clipping</td>
<td></td>
</tr>
</tbody>
</table>

Knowledge and understand the organization necessary to conduct rehearsals.

Determine methods of recording with various vocal performers.

Investigate and edit vocal parts to create a professional level product.

Using music production software, students add multiple vocal recordings to compositions from previous assignments which will include/demonstrate:

- 3 or more recorded vocal parts
- use of channels effects
- 6 or more additional timbres
- use of gates and EQ in vocal tracks
- group channels for vocals

Microphones

http://www.youtube.com/watch?v=ogsh1d5DwSQ

http://www.recordingconnection.com/courses/audio-engineering/audio-lesson-03

Tips for Vocal Recording

http://www.soundonsound.com/sos/oct98/articles/20tips.htm1

http://www.soundonsound.com/sos/jun01/articles/vocalsfaq.asp
### Standard 1.1, 1.3

Students should analyze the concept of signal flow, and how to use it within a mixer channel, as well as throughout the mixer.

Students demonstrate how to gauge the amount of reverb, echo, or delay to add/cut from a signal.

Students demonstrate how to avoid clipping by using gain.

Students know how to remove unused EQ ranges as well as removing noise and distortion.

<table>
<thead>
<tr>
<th>How is mute/solo used in equalizer channel effect?</th>
<th>What challenges are featured with sends and panning?</th>
<th>How do you decide removing noise and distortion?</th>
<th>How are the following used:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editing and refining single voices in a multi-track audio recording.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- identifying noise and distortion in a recording
- enhancing the listener’s experience with EQ
- understanding signal flow

- Applying effects to add dimension/space to a voice/timbre
- monitoring signal levels

<table>
<thead>
<tr>
<th>Channel controls</th>
</tr>
</thead>
</table>

- use of reverb or delay on at least 2 channels
- noise reduction on every channel
- distortion removed on every channel
- use of compression on at least 1 channel

Using music production software, students will edit compositions using plug-ins and effects include/demonstrate:

- use of reverb or delay on at least 2 channels
- noise reduction on every channel
- distortion removed on every channel
- use of compression on at least 1 channel

- How to use EQ


- Understanding EQ


- The Art of Equalization

  [http://ethanwiner.co m/equalizers.html](http://ethanwiner.com/equalizers.html)

- How to use EQ

  [http://www.youtube. com/watch?v=c4GbBpNzDdQ#t=71](http://www.youtube.com/watch?v=c4GbBpNzDdQ#t=71)
<table>
<thead>
<tr>
<th>NJDOE Student Learning Objective</th>
<th>Essential Questions</th>
<th>Skills</th>
<th>Resources</th>
<th>Sample Activities</th>
</tr>
</thead>
</table>
| **Standard 1.1, 1.2, 1.3, 1.4** | How does compression impact mixing?  
What type of sound does limiting and peaking bring to a track?  
What challenges can occur with Grouping/group tracks?  
Why is Ear training important?  
What are different types of formatting? | Use of mixing techniques to create professional creating recordings  
- running a mixing session  
- the mixing environment  
- Additive and Subtractive mixing methods  
- Using reference mixes  
- Mastering effects/plug-ins  
- Audio formats | Mixing  
http://www.recordingconnection.com/courses/audio-engineering/audio-lesson-14  
http://www.youtube.com/watch?v=pxc_4hjVHU  
Mixing Low end frequencies  
http://www.youtube.com/watch?v=WIUmXk54ZD8  
Mixing Secrets  
http://www.cambridge-mt.com/ms- | Using music production software, students edit compositions to create professional quality mixes which will include/demonstrate:  
- use of channels effects  
- noise reduction on every channel  
- panning, 2 types of automation  
- use of compression, EQ, and limiters on master track  
- Use of at least 6 group channels  
A composition at least 80 measures in length  
Students choose an optimal mixing environment, or create a better mixing environment. |
<table>
<thead>
<tr>
<th>mtk.htm</th>
<th>Students operate equipment in a studio at a proficient level.</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://audio.tutsplus.com/sessions/creative-session-all-about-mixing/">http://audio.tutsplus.com/sessions/creative-session-all-about-mixing/</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Standard 1.1, 1.2, 1.3, 1.4</strong></td>
<td><strong>How are instruments of the world universal in some aspects?</strong></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Analyze musical influences within a specific genre</td>
<td>How have music styles influenced each other? music styles</td>
</tr>
<tr>
<td>Analyze influential producers in various genres.</td>
<td>Why is the study of music history important for current artist?</td>
</tr>
<tr>
<td>Producing music from various cultures, styles, and genres.</td>
<td>How do you differentiate classic, traditional styles, and contemporary styles?</td>
</tr>
<tr>
<td>Investigate instruments from different countries</td>
<td>- Creating compositions based on various genres</td>
</tr>
</tbody>
</table>

**Musician’s Law:**
http://www.gcglaw.com/resources/entertainment/music-copyright.html

**Internet and Music Copyright Law:**
http://cyber.law.harvard.edu/fallsem98/final_papers/Tada.html

**Music Contracts:**
http://hiphopproduction.com/free-music-contracts/

**Music Publishing & Licensing Terminology:**
http://www.licensequote.com/mlq/music_license_quote.html

**Using music production software, students will use previously created loops, sequences and projects to produce a mix.** Mixes will include/demonstrate:

- Traditional instruments of a distinct genre
- A composition at least 80 measures in length
- Professional master mix with 8 or more channels, 4 or more group channels
- noise reduction on every channel
- panning, 2 types of automation musical style of chosen genre

Students lists and recalls influential musicians/producers in various genres
<p>| Standard 1.1, 1.2, 1.3, 1.4 | What is a copyright law and how is it used? Why is publishing/distribution important to the artist? How are licensing and royalties used by the label and the artist? Ability to communicate &amp; negotiate with professionals within the music industry.  - learning artists' rights  - becoming fluent in the vocabulary associated with the legal aspect of the industry  - understanding contract language  - negotiating skills | Musician’s Law: <a href="http://www.gcglaw.com/resources/entertainment/music-copyright.html">http://www.gcglaw.com/resources/entertainment/music-copyright.html</a>  Internet and Music Copyright Law: <a href="http://cyber.law.harvard.edu/fallsem98/final_papers/Tada.html">http://cyber.law.harvard.edu/fallsem98/final_papers/Tada.html</a>  Music Contracts: <a href="http://hiphopproduction.com/free-music-contracts/">http://hiphopproduction.com/free-music-contracts/</a>  Music Publishing &amp; Licensing Terminology: <a href="http://www.licensequote.com/mlq/music_license_quote.html">http://www.licensequote.com/mlq/music_license_quote.html</a> | Students will create a file of legal documents that will protect a specific compilation of their creative works which will include:  - 3 or more copyright forms (Form SR)  - ASCAP/BMI filing form  - Production contract  Electronic distribution contract  Students read various types of contracts to become familiar with contract language |</p>
<table>
<thead>
<tr>
<th><strong>Standard 1.1, 1.2, 1.3, 1.4</strong></th>
<th><strong>How does a Recording Artist get noticed and obtain contracts?</strong></th>
<th><strong>Choosing a career path best suited to interest, and understanding the different jobs within the music industry.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research the career paths of contemporary and influential music industry professionals.</td>
<td>How does a producer get noticed and obtain contracts in that field?</td>
<td>- knowing the various careers in the music industry</td>
</tr>
<tr>
<td>Analyze job descriptions in their own words to build understanding of specific roles and responsibilities associated with various jobs.</td>
<td>How does a manager get noticed and obtain contracts in that field?</td>
<td>- how different jobs relate to each other within the industry</td>
</tr>
<tr>
<td>Investigate the type of courses they should be taking, what types of majors, and what schools offer them</td>
<td>How does a lawyer get noticed and obtain contracts in that field?</td>
<td>- researching learning institutions</td>
</tr>
<tr>
<td>Research internships that will develop their business relationships</td>
<td>What type of license is necessary?</td>
<td>- building/ working with teams on album projects</td>
</tr>
</tbody>
</table>

**Music jobs:**

**Important skills for careers in the Music Industry:**

**Top Music Production schools in New York:**

**Students will create career maps for multiple careers in the recording industry. Career maps/tracks will include:**
- 3 different career choices within the industry
- lists of necessary skills for each career
- relevant college courses / majors
- colleges with relevant majors
- internships/resume building opportunities.

**Students research internships that will develop their business relationships**

**Write / Rewrite resumes and skills, training, and experience to make resumes more marketable**

**Students can carry out independent projects that would prepare them for specific jobs in the music industry.**

**Write / Rewrite resumes and skills,**
Students research internships that will develop their business relationships and gain training, and experience to make resumes more marketable.
| **Standard 1.1, 1.2, 1.3, 1.4** | **How you create effective show-casing?**  
Students will research multiple promotion methods.  
Investigate research methods of successful promotional campaigns to apply to their own campaigns  
Analyze market research in order to target their audience.  
Understanding design software, students should create mock-ups of promotional items they can use to gain fans/followers  
Demonstrating an understanding all the components of planning a showcase  
Analyze effective viral video campaigns to model their own from. | **Effectively generating interest in a song, compilation, or artist.**  
- using multiple websites and social media towards a specific goal.  
- organizing promotional events  
- Creating fans and mobilizing them creating a viral campaign | **How to Promote Music:**  
http://www.wikihow.com/Promote-Your-Music  
Getting more fans:  
http://www.ultimate-guitar.com/columns/the_guide_to/how_to_effectively_promote_your_music_and_gain_more_fans.html  
Free Music Promotion:  
http://hypebot.typepad.com/hypebot/100-free-affordable-high-.html  
Twitter Promotion:  
http://diymusician.cdbaby.com/2013/06/10-hot-twitter-tips- | **Students will create and execute a campaign to promote a specific compilation of their original compositions. Promotional campaigns will include:**  
- A webpage  
- Followers/Fans  
- Viral video project  
- Printed promotional materials  
An event to showcase their music |
<table>
<thead>
<tr>
<th>to-get-your-music-out-there/</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://twoplusmedia.com/marketing-and-promotion-the-difference">http://twoplusmedia.com/marketing-and-promotion-the-difference</a></td>
</tr>
</tbody>
</table>
### Unit Vocabulary

- Showcasing
- Websites / Internet
- Building a Following
- Viral Videos
- Album Artwork
- Press Kits
- Social Media
- Marketing Campaigns
- Music Videos
- Recording Artist
- Producer
- Manager
- Entertainment Lawyer
- A&R
- Audio Engineer
- copyright law
- publishing/ distribution
- licensing
- royalties
- contracts

- Moods
- Textures
- Themes
- Genre
- Sound Palette
- Character/Setting
- Compression
- Limiting
- Peaking
- Grouping/group tracks
- Ear training
- Exporting / Formats
- mute/solo
- sends, panning
- removing noise and distortion
- reverb, echo, delay
- channel compression
- clipping
- intro
- verse
- chorus / hook
- bridge / break

- volume, dBs, velocity
| - panning             | - solo                  |
| - automation         | - outro / adlib         |
| - group/sub/bus tracks | - modulation            |
| - equalizers         | attack times            |
| marimba              | - sweeping,             |
| vibraphone           | oscillators             |
| xylophone            | - LFO                  |
| hand bells           | “C” scale              |
| tubular bells        | Major scale pattern     |
| steel pan            | Root notes              |
| chord patterns       | replicating scales      |
| - major chords       | Tempo                  |
| - minor chords       | BPM                     |
| - triads             | Metronome               |
| - inversion          |                        |
## Project

At the end of the first semester, students will create a medley of compositions created from synthesized musical elements.

Using digital music samples, students will create a pre-prepared musical performance to be critiqued by a peer-generated rubric based on the following considerations:

- Production methods  
- Editing tools & efficiency  
- Use of varied musical styles  
- Signal flow & hardware  
- Artistic decision making  
- Communicating the desired mood/message  
- Proper use of Equalization  
- Sound Quality  
- Acoustics  

Students will present their Intermediate projects in the form of a digital presentation.