MIDI Recording and Editing

Content Area: **Practical Arts**
Course(s): **Music Recording & Engineering**
Time Period: **Marking Period 1**
Length: **2-3 weeks**
Status: **Published**

Course Pacing Guide

Unit	MP	Weeks
Physics Of Sound	1	2-3
Logic Pro Introduction (Digital Audio Software)	1	2-3
Microphones and Recording	1	3-4
MIDI Recording/Editting	1	2-3
Multi Track Recording	2	2
Mutli tack Mix/Mastering	2	3-4
Foley Cinema Sound Production	2	3-4
Live Sound	2	2-3

Unit Overview

Introduction to MIDI technology and MIDI recording and editing.

Enduring Understandings

- Having a understanding of MIDI data and how it differs from audio data.
- Having a working knowledge of MIDI music files and how to edit them using MIDI FX within a DAW.

Essential Questions

- What is MIDI?
- How is MIDI different from Audio?
- How can one effectively incorporate MIDI files into a multi track project?
- What are advantages/disadvantages of MIDI in the music recording/Engineering world?

New Jersey Student Learning Standards (No CCS)

TECH.8.1.12	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.A.1	Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
TECH.8.1.12.A.2	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.
TECH.8.1.12.A.CS1	Understand and use technology systems.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
TECH.8.1.12.B.CS2	Create original works as a means of personal or group expression.

Amistad Integration

Large Group Discussion/Listening Analysis:

- Discuss the life and career of:
- Wondagurl
- DJ Jazzy Jeff
- DJ Kool Herc

LA.RI.11-12.10b	By the end of grade 12, read and comprehend literary nonfiction at grade level text-complexity or above.
SEL.PK-12.1.2	Recognize the impact of one's feelings and thoughts on one's own behavior

Holocaust/Genocide Education

Large Group Discussion/Listening Analysis:

- Discuss the life and career of famous Jewish american sound engineers/musicians:
- Elliott Scheiner
- Benny Goodman

- Adam Sandler

Interdisciplinary Connections

VPA.1.1.12	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.
VPA.1.1.12.B.CS1	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.
CAEP.9.2.12.C	Career Preparation
CAEP.9.2.12.C.2	Modify Personalized Student Learning Plans to support declared career goals.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.

Technology Standards

TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.A.1	Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
TECH.8.1.12.A.2	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.
TECH.8.1.12.A.CS1	Understand and use technology systems.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
TECH.8.1.12.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.12.B.CS2	Create original works as a means of personal or group expression.
TECH.8.1.12.C.CS1	Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media.
TECH.8.1.12.C.CS4	Contribute to project teams to produce original works or solve problems.
TECH.8.2.12.D.5	Explain how material processing impacts the quality of engineered and fabricated products.
TECH.8.2.12.D.6	Synthesize data, analyze trends and draw conclusions regarding the effect of a technology on the individual, society, or the environment and publish conclusions.
TECH.8.2.12.D.CS1	Apply the design process.

21st Century Themes/Careers

HPE.2.2.8.A.2	Demonstrate the use of refusal, negotiation, and assertiveness skills when responding to peer pressure, disagreements, or conflicts.
CAEP.9.2.12.C	Career Preparation
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.

Financial Literacy Integration

1. The State Board of Education shall require that a school district incorporate in each of the grades [1][kindergarten] six[1] through eight financial literacy instruction to pupils enrolled in those grades. The purpose of the instruction shall be to provide [1][elementary and][1]middle school students with the basic financial literacy necessary for sound financial decision-making.

The instruction shall meet the requirements established by the State board and shall:

a. be appropriate to, and reflect the age and comprehension of, the students enrolled in the particular grade level; and

b. include content on budgeting, savings, credit, debt, insurance, investment, and other issues associated with personal financial responsibility as determined by the State board.

Instructional Strategies & Learning Activities

- **MIDI Composition – Introduction to MIDI sounds and virtual keyboard functions.**
    - Instructional activities shall include individual hands on work with a MIDI controller as well as a virtual keyboard.
    - Instructional activities shall also include partner work in creating a MIDI composition using a MIDI controller and a DAW.
    - MIDI stands for Music Instrument Digital Interface.
    - MIDI is computer data that is shared between two or more digital venues that recreate an audible sound. This data is based on a "sampling" of sound that is received and "interpreted".
    - MIDI controller – a keyboard or pad that makes no sound of it's own, but is linked to a MIDI computer system and plays the sounds from the MIDI sound bank in the system.
    - MIDI keyboard – A musical keyboard that has it's own bank of MIDI sounds.
    - In addition to MIDI keyboards, we also use MIDI drum modules etc.

Differentiated Instruction

Examples may include:

- Curriculum Map
- Inquiry/Problem-Based Learning
- Learning preferences integration (visual, auditory, kinesthetic)
- Sentence & Discussion Stems
- Tiered Learning Targets
- Self-Directed Learning
- Debate
- LMS use

- Student Data Inventories
- Mastery Learning (feedback toward goal)
- Rubrics
- Learning Menus
- Learning Through Workstations
- Concept Attainment
- Mentoring
- Student Interest & Inventory Data

Formative Assessments

- Daily Teacher Observation of student feedback.
- Weekly check point written assessments.

Summative Assessment

Digital Audio Project - MIDI controller Project

Benchmark Assessments

Benchmark - 90% of students in the class will achieve a score of 93 or higher on the summative asessment (MIDI Controller Project)

Alternate Assessments

- Oral response to questions in review of material.
- More time alloted for written assignments/asessments.
- Take Home projects/reviews/asessments.

Resources & Technology

Digital Audio Workstation - Logic Pro X.

I Mac - Computer system IOS platform

MIDI Keyboard controller

BOE Approved Texts

BOE Approved Texts N/A

Closure

Such as:

- Low-Stakes Quizzes - Give a short quiz using technologies like Kahoot or a Google form.
- Have students write down three quiz questions (to ask at the beginning of the next class).
- Question Stems - Have students write questions about the lesson on cards, using question stems framed around Bloom's Taxonomy. Have students exchange cards and answer the question they have acquired.
- Kids answer the following prompts: "What takeaways from the lesson will be important to know three years from now? Why?
- Ask a question. Give students ten seconds to confer with peers before you call on a random student to answer. Repeat.
- Have kids orally describe a concept, procedure, or skill in terms so simple that a child in first grade would get it.
- Direct kids to raise their hands if they can answer your questions. Classmates agree (thumbs up) or disagree (thumbs down) with the response.
- Have kids create a cheat sheet of information that would be useful for a quiz on the day's topic.
- Kids write notes to peers describing what they learned from them during class discussions.
- Ask students to summarize the main idea in under 60 seconds to another student acting as a well-known personality who works in your discipline. After summarizing, students should identify why the famous person might find the idea significant.
- Have students complete the following sentence: "The [concept, skill, word] is like _____ because _____."

ELL

Such as:

- Alternate Responses
- Advance Notes
- Extended Time
- Teacher Modeling
- Simplified Written and Verbal Instructions
- Frequent Breaks
- E-Dictionaires

Special Education

List is not inclusive but may include examples such as:

- Shorten assignments to focus on mastery of key concepts.
- Shorten spelling tests to focus on mastering the most functional words.
- Substitute alternatives for written assignments (clay models, posters, panoramas, collections, etc.)
- Specify and list exactly what the student will need to learn to pass.
- Evaluate the classroom structure against the student's needs (flexible structure, firm limits, etc.).
- Keep workspaces clear of unrelated materials.
- Keep the classroom quiet during intense learning times.
- Reduce visual distractions in the classroom (mobiles, etc.).
- Provide a computer for written work.
- Seat the student close to the teacher or a positive role model.
- Use a study carrel. (Provide extras so that the student is not singled out.)
- Provide an unobstructed view of the chalkboard, teacher, movie screen, etc.
- Keep extra supplies of classroom materials (pencils, books) on hand.
- Maintain adequate space between desks.
- Give directions in small steps and in as few words as possible.
- Number and sequence the steps in a task.
- Have student repeat the directions for a task.
- Provide visual aids.
- Go over directions orally.
- Provide a vocabulary list with definitions.
- Permit as much time as needed to finish tests.
- Allow tests to be taken in a room with few distractions (e.g., the library).
- Have test materials read to the student, and allow oral responses.
- Divide tests into small sections of similar questions or problems.
- Allow the student to complete an independent project as an alternative test.
- Give progress reports instead of grades.
- Grade spelling separately from content.
- Allow take-home or open-book tests.
- Show a model of the end product of directions (e.g., a completed math problem or finished quiz).
- Stand near the student when giving directions or presenting a lesson.
- Mark the correct answers rather than the incorrect ones.
- Permit a student to rework missed problems for a better grade.

- Average grades out when assignments are reworked, or grade on corrected work.
- Use a pass-fail or an alternative grading system when the student is assessed on his or her own growth.

504

Examples of accommodations in 504 plans include but are not limited to:

- preferential seating
- extended time on tests and assignments
- reduced homework or classwork
- verbal, visual, or technology aids
- modified textbooks or audio-video materials
- behavior management support
- adjusted class schedules or grading
- verbal testing
- excused lateness, absence, or missed classwork
- pre-approved nurse's office visits and accompaniment to visits
- occupational or physical therapy

At Risk

Examples may include:

- Use of mnemonics
- Have student restate information
- Provision of notes or outlines
- Concrete examples
- Use of a study carrel
- Assistance in maintaining uncluttered space
- Weekly home-school communication tools (notebook, daily log, phone calls or email messages)
- Peer or scribe note-taking
- Lab and math sheets with highlighted instructions
- Graph paper to assist in organizing or lining up math problems
- Use of manipulatives
- No penalty for spelling errors or sloppy handwriting
- Follow a routine/schedule
- Teach time management skills
- Verbal and visual cues regarding directions and staying on task
- Adjusted assignment timelines
- Visual daily schedule

- Immediate feedback
- Work-in-progress check
- Pace long-term projects
- Preview test procedures
- Film or video supplements in place of reading text
- Pass/no pass option
- Cue/model expected behavior
- Use de-escalating strategies
- Use peer supports and mentoring
- Have parent sign homework/behavior chart
- Chart progress and maintain data

Gifted and Talented

Focus on effort and practice

Offer the Most Difficult First

Offer choice

Speak to Student Interests

Allow G/T students to work together

Encourage risk taking