

# MUSIC TECHNOLOGY I

Open to all students in grades 9 -12, this course is designed for those seeking knowledge and experience in Audio and Recording technology. Topics covered include: live sound recording and sound reinforcement; digital recording and midi sequencing; audio engineering and editing; effects processing and microphone technique; music business and commercial production. Connecting music and technology, students will use digital audio workstations and a variety of recording studio equipment. This is a one-semester class that meets twice per 4 day rotation.

Prerequisite: None; a working knowledge of computers is recommended. Previous musical experience is not necessary, but musicians, performers and songwriters will benefit greatly from this course.

## Course Overview

### Course Goals

Students will have the ability to understand and engage with music in a number of different ways, including the **creative**, **responsive** and **performative** artistic processes. They will have the ability to create, edit, and enhance music performances using both hardware and computer software. They will attain literacy in digital / audio recording.

### Artistic Processes

- Create
- Perform (Present/Produce)
- Respond
- Connect

### Anchor Standards

- Generate and conceptualize artistic ideas and work
- Organize and develop artistic ideas and work.
- Refine and complete artistic work.
- Develop and refine artistic work for presentation.
- Convey meaning through the presentation of artistic work
- Apply criteria to evaluate artistic work.
- Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

### Course Skill Objectives

Students will be able to:

- Create a musical project using midi sequencing
- Record and edit music using multi track digital audio workstation (DAW).
- Analyze acoustic properties.
- Engineer and design sound reinforcement.
- Troubleshoot and resolve signal flow audio connections.
- Design and create a commercial audio production
- Identify connections between music and music technology to related commercial industries and careers.

<u>Units of Study</u>	<u>Assessments</u>
<p>I. Introduction to Live Sound 3-4 weeks</p> <p>II. Introduction to Step Sequencing and MIDI 4- 5 weeks</p> <p>III. Introduction to Audio Editing 6 weeks</p> <p>IV. Introduction to Audio Production 4-5 weeks</p>	<p>Live Sound</p> <ul style="list-style-type: none"> <li>• Basic Sound Reinforcement System</li> </ul> <p>Step Sequencing</p> <ul style="list-style-type: none"> <li>• Beginning Step Sequencing</li> <li>• MIDI Song Sequencing</li> </ul> <p>Audio Editing</p> <ul style="list-style-type: none"> <li>• Audio Loop Editing</li> <li>• Dialogue Edit</li> <li>• Radio Spot</li> </ul> <p>Audio Production</p> <ul style="list-style-type: none"> <li>• Cover Song</li> <li>• Sound to Video</li> </ul>

# Introduction to Live Sound

*Setting up and operating a basic sound reinforcement system.*

## Skill Objectives

- Students will be able to setup and breakdown a sound reinforcement system.
- Students will be able to properly place a sound reinforcement system.
- Students will be able to connect various components of a sound system.
- Students will be able to route signals from source to intended destination.
- Students will be able to set appropriate signal levels throughout the system.
- Students will be able to test and troubleshoot the system.
- Students will be able to identify mic level vs. line level devices.

<b>Responding</b> <i>Understanding and evaluating how the arts convey meaning.</i>	<b>Performing (Present/Produce)</b> <i>Realizing artistic ideas and work through interpretation and presentation.</i>
<b><u>Enduring Understanding</u></b> <ul style="list-style-type: none"><li>• The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria based on the elements of music. (PROGRESSIVE BY GRADE LEVEL)</li></ul> <b><u>Essential Question</u></b> <ul style="list-style-type: none"><li>• How do we judge the quality of musical work(s) and performances?</li></ul> <b>Process Components: Analyze, Interpret</b>	<b><u>Enduring Understanding</u></b> <ul style="list-style-type: none"><li>• 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.</li><li>• Musicians judge performance based on criteria that vary across time, place and cultures.</li></ul> <b><u>Essential Questions</u></b> <ul style="list-style-type: none"><li>• How do musicians improve the quality of their performance?</li><li>• When is a performance judged ready to present?</li></ul> <b>Process Components: Analyze, Evaluate, Refine, Present</b>
<b>Instructional Strategies/Process</b> <ul style="list-style-type: none"><li>• Students will identify and interpret the components of a sound system set up.</li><li>• Students will analyze, inspect, and evaluate the performance of their sound systems setup and set up of others both aurally and visually.</li></ul>	<b>Instructional Strategies/Process</b> <b>Project: <i>Basic Sound System Reinforcement</i></b> <ul style="list-style-type: none"><li>• Students will analyze, evaluate and refine their sound reinforcement system for successful enhancement of instrumental and vocal performances (microphone technique).</li><li>• Students will present proper cable wrapping technique.</li></ul>

	<ul style="list-style-type: none"><li>• Students will demonstrate correct processor connection and usage.</li></ul>
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**Assessments:**

- Basic Sound Reinforcement System
- Terminology assessment
- Cable wrapping skill assessment

# Introduction to Step Sequencing and MIDI

*Creating rhythmically organized, loop based song sequences, using music production software.*

## Skill Objectives

- Students will be able to operate loop based sequencing software.
- Students will be able to create measure/beat based patterns and assemble into song form

<b>Responding</b> <i>Understanding and evaluating how the arts convey meaning.</i>	<b>Performing (Present/Produce)</b> <i>Realizing artistic ideas and work through interpretation and presentation.</i>	<b>Creating</b> <i>Conceiving and developing new artistic ideas and work.</i>
<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria based on the elements of music.</li> </ul> <p><b><u>Essential Question</u></b></p> <ul style="list-style-type: none"> <li>• How do we judge the quality of musical work(s) and performances?</li> </ul> <p><b>Process Components: Analyze, Evaluate</b></p>	<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Musicians judge performance based on criteria that vary across time, place and cultures.</li> </ul> <p><b><u>Essential Questions</u></b></p> <ul style="list-style-type: none"> <li>• How do musicians improve the quality of their performance?</li> <li>• When is a performance judged ready to present?</li> </ul> <p><b>Process Components: Analyze, Rehearse, Evaluate, Refine, Present</b></p>	<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• Musicians' creative choices are influenced by their expertise, context, and expressive intent.</li> <li>• Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.</li> </ul> <p><b><u>Essential Questions</u></b></p> <ul style="list-style-type: none"> <li>• How do musicians make creative decisions?</li> <li>• How do musicians improve the quality of their creative work?</li> </ul> <p><b>Process Components: Plan and Make, Evaluate and Refine</b></p>
<p><b>Instructional Strategies/Process</b>  <b>Projects:</b> <i>Beginning Step Sequencing, Song Sequencing</i></p>	<p><b>Instructional Strategies/Process</b>  <b>Projects:</b> <i>Beginning Step Sequencing, Song Sequencing</i>  Using MIDI</p>	<p><b>Instructional Strategies/Process</b>  <b>Projects:</b> <i>Beginning Step Sequencing, Song Sequencing</i>  Using MIDI</p>

<ul style="list-style-type: none"> <li>• Students will analyze and understand how beats and measures are organized in piano roll and step sequencer format.</li> <li>• Students will analyze and evaluate their own projects for appropriate rhythmic alignment and accuracy, quantizing.</li> <li>• Students will analyze and evaluate peer projects for appropriate rhythmic alignment and accuracy.</li> </ul>	<ul style="list-style-type: none"> <li>• Students will rehearse, refine, play and record, in real time, midi instrument tracks using the electronic keyboard.</li> <li>• Students will analyze and evaluate their recordings and quantize rhythmic inaccuracies.</li> <li>• Students will upload projects and present to the class.</li> </ul>	<ul style="list-style-type: none"> <li>• Students will work alone or in pairs to create a short piece in verse/chorus form with a minimum of 2 tracks (drums and bass) using a step sequencer, and appropriate use of grid structure and rhythmic patterns.</li> <li>• Students will evaluate and refine their compositions to meet project requirements.</li> <li>• Students will create in step time and in real time, various instrumental music tracks.</li> </ul>
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**Assessments:**

- Beginning Step Sequencing
  - *Beginning Step Sequencing Drum Packet*
- Song Sequencing
- Generic Project checklist

# Introduction to Audio Editing

## Skill Objectives

- Students will be able to operate music production software.
- Students will be able to connect and set levels for various components of a digital audio workstation.
- Students will be able to record/import audio into music production software.
- Students will be able to edit audio within the digital domain.
- Students will be able to mix multiple tracks to one stereo master.

<b>Responding</b> <i>Understanding and evaluating how the arts convey meaning.</i>	<b>Performing (Present/Produce)</b> <i>Realizing artistic ideas and work through interpretation and presentation.</i>	<b>Creating</b> <i>Conceiving and developing new artistic ideas and work.</i>
<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria based on the elements of music.</li> </ul> <p><b><u>Essential Question</u></b></p> <ul style="list-style-type: none"> <li>• How do we judge the quality of musical work(s) and performances?</li> </ul> <p><b>Process Components: Analyze, Evaluate, Refine</b></p>	<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Musicians judge performance based on criteria that vary across time, place and cultures.</li> </ul> <p><b><u>Essential Questions</u></b></p> <ul style="list-style-type: none"> <li>• How do musicians improve the quality of their performance?</li> <li>• When is a performance judged ready to present?</li> </ul> <p><b>Process Components: Analyze, Rehearse, Evaluate, Refine, Present</b></p>	<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• Musicians' creative choices are influenced by their expertise, context, and expressive intent.</li> <li>• Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.</li> </ul> <p><b><u>Essential Questions</u></b></p> <ul style="list-style-type: none"> <li>• How do musicians make creative decisions?</li> <li>• How do musicians improve the quality of their creative work?</li> </ul> <p><b>Process Components: Plan and Make, Evaluate and Refine</b></p>
<p><b>Instructional Strategies/Process</b>  <b>Projects:</b> <i>Dialogue Edit, Radio Spot, Audio Loop Editing</i></p> <ul style="list-style-type: none"> <li>• Students will listen to, analyze, evaluate and refine their work based on defined project parameters</li> </ul>	<p><b>Instructional Strategies/Process</b>  <b>Project:</b> <i>Dialogue Edit</i>            Students will work alone or in pairs to:</p> <ul style="list-style-type: none"> <li>• record (analyze, rehearse, evaluate, refine and present) a given script</li> </ul>	<p><b>Instructional Strategies/Process</b>  <b>Project:</b> <i>Radio Spot</i>            Students will work alone or in pairs to:</p> <ul style="list-style-type: none"> <li>• create a commercial</li> <li>• Record an existing radio spot adhering to a specific time length</li> </ul>

<ul style="list-style-type: none"> <li>Students will listen to, analyze, and evaluate the work of their peers based on defined project parameters.</li> </ul>	<ul style="list-style-type: none"> <li>edit the audio using various tools available in a digital audio workstation</li> <li>re-arrange and refine the original script to change the meaning.</li> </ul>	<ul style="list-style-type: none"> <li>Add sound effects</li> <li>Add underscore</li> <li>Evaluate and refine their work as necessary</li> <li>Culminate project with a final mix down to a stereo audio master.</li> </ul> <p><b>Project:</b> <i>Audio Loop Editing</i>  Students will work alone or in pairs to create a loop based composition</p> <ul style="list-style-type: none"> <li>Select prerecord loops</li> <li>Manipulate the loops to create an original 64+ measure composition that <ul style="list-style-type: none"> <li>matches master tempo</li> <li>changes pitch</li> <li>changes tempo</li> </ul> </li> </ul>
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**Assessments:**

- Audio Loop Editing
- Dialogue Edit
- Radio Spot



# Introduction to Audio Production

## Skill Objectives

- Students will record a “cover” of a popular song using a digital audio workstation.
- Students will integrate live instruments, vocals, and midi tracks in one project.
- Students will operate music production software.
- Students will record and edit midi tracks.
- Students will automate various parameters of midi/audio tracks
- Students will mix and export to stereo master

<b>Responding</b> <i>Understanding and evaluating how the arts convey meaning.</i>	<b>Performing (Present/Produce)</b> <i>Realizing artistic ideas and work through interpretation and presentation.</i>	<b>Creating</b> <i>Conceiving and developing new artistic ideas and work.</i>
<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria based on the elements of music.</li> </ul> <p><b><u>Essential Question</u></b></p> <ul style="list-style-type: none"> <li>• How do we judge the quality of musical work(s) and performances?</li> </ul> <p><b>Process Components: Analyze, Evaluate, Refine</b></p>	<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Musicians judge performance based on criteria that vary across time, place and cultures.</li> </ul> <p><b><u>Essential Questions</u></b></p> <ul style="list-style-type: none"> <li>• How do musicians improve the quality of their performance?</li> <li>• When is a performance judged ready to present?</li> </ul> <p><b>Process Components: Analyze, Rehearse, Evaluate, Refine, Present</b></p>	<p><b><u>Enduring Understanding</u></b></p> <ul style="list-style-type: none"> <li>• Musicians’ creative choices are influenced by their expertise, context, and expressive intent.</li> <li>• Musicians evaluate, and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.</li> </ul> <p><b><u>Essential Questions</u></b></p> <ul style="list-style-type: none"> <li>• How do musicians make creative decisions?</li> <li>• How do musicians improve the quality of their creative work?</li> </ul> <p><b>Process Components: Plan and Make, Evaluate and Refine</b></p>

<p><b>Instructional Strategies/Process</b>  <b>Projects:</b> <i>Cover Song, Sound to Video</i></p> <ul style="list-style-type: none"> <li>• Students will listen to, analyze, evaluate and refine their work based on defined project parameters</li> <li>• Students will listen to, analyze, and evaluate the work of their peers based on defined project parameters</li> </ul>	<p><b>Instructional Strategies/Process</b>  <b>Project:</b> <i>Cover Song</i></p> <p>Students will work in groups to:</p> <ul style="list-style-type: none"> <li>• Record and produce a “cover” of an existing popular recording</li> <li>• Analyze song structure for rhythmic, harmonic, melodic and textural components</li> <li>• Create basic rhythm tracks using midi</li> <li>• Rehearse, evaluate and refine their audio performance prior to recording</li> <li>• Record audio tracks</li> <li>• Refine recording through editing, processing and automation.</li> <li>• Present final stereo mix</li> </ul> <p><i>The objective is to reproduce the original as closely as possible including the vocals, given student/class musical proficiency. The project culminates with a final mix down to a stereo audio master.</i></p>	<p><b>Instructional Strategies/Process</b>  <b>Project:</b> <i>Sound to Video</i></p> <p>Students will work alone or in pairs to replace and create an entire audio track, including sound effects, dialogue, and music for an existing television commercial and sync it with the video in a digital audio workstation, evaluating and refining their work as necessary.</p> <ul style="list-style-type: none"> <li>• Import existing commercial</li> <li>• Remove audio</li> <li>• Create and record replacement dialogue</li> <li>• Create and record underscore</li> <li>• Create and record sound effects</li> <li>• Perform and record “foley” sound effects</li> <li>• Mix and export to stereo/video format</li> <li>• Present to class</li> </ul>
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**Assessments:**

- Cover Song
- Sound to Video

Fairfield Public Schools  
Assessment Pack  
Music Technology I

Name \_\_\_\_\_

Date \_\_\_\_\_

<b><u>TERMS</u></b>			<b><u>DEFINITIONS</u></b>	<b><u>Match definitions to terms. Place correct definition # on line next to appropriate term.</u></b>
Amplitude	_____	1	a specific frequency from a speaker is picked up by a mic and reproduced, causing a loud hum or squeal.	
Balanced	_____	2	abbreviation for equalization. Adjusts the level of various frequencies. Tone control.	
Cardioid	_____	3	anything that changes energy from one form to another. ex. microphone	
Channel strip	_____	4	sensitive mic that has thin metal ribbon element. Warm sound. Cannot handle phantom power. Figure 8 pattern.	
Condenser Mic	_____	5	cable connection point (jack) that receives a signal in.	
dB	_____	6	very low powered amp that raises the input signal of a mic or instrument.	
Diaphragm	_____	7	cable connector with 3 pins used for mics. Balanced.	
Dynamic Mic	_____	8	switch on channel that allows you to group volume control of several channels to 1 sub master.	
EQ	_____	9	Control board with multiple channels that allows input signals to be blended before sending to output.	
Feedback Loop	_____	10	Decibel, a measure of amplitude or volume.	
Frequency	_____	11	track or channel control that silences all other tracks or channels.	
Gain	_____	12	two wire cable that allows noise to build over longer lengths	
Hertz	_____	13	tip-sleeve, cable connector. Two wire. Unbalanced. Ex. Guitar cable.	
Input	_____	14	first stage of a channel. allows initial adjustment of input signal level.	
Master	_____	15	flexible membrane on a microphone that converts sound waves to electrical signal.	
FOH	_____	16	low frequencies increase in level as source gets close to mic.	
Mixer	_____	17	mic that picks up sound evenly from all directions.	
mute	_____	18	mixer section that controls all inputs and signals as a whole. Normally on far right side.	
Omnidirectional	_____	19	Main speakers facing the audience / front of house. Placed in front of stage to reduce chance of feedback.	

Phantom power	_____	20	Section of a mixer where adjustments for gain, eq, fx, pan, level, etc. are made for each incoming signal. Left side.
Proximity Effect	_____	21	Measure of resistance or impedance.
Transducer	_____	22	pick up pattern of a unidirectional mic. shaped like a mushroom or heart.
TRS	_____	23	Auxiliary signal path. Lets you send separate level to stage monitors or FX. Also called bus.
Unbalanced	_____	24	power source needed for condenser mics to function.
XLR	_____	25	sensitive mic that needs an outside power source to work.
Pan	_____	26	simply, a measure of anything per second. In this case, frequency.
Preamp	_____	27	speed of a vibration. Controls pitch.
Midi Cable	_____	28	three wire cable that rejects noise over long distances.
Ohm	_____	29	Musical Instrument Digital Interface cable. Connects electronic instruments and computers. Transmits data.
PFL	_____	30	tip, ring, sleeve, cable connector. Three wires. Balanced.
Sub master / group	_____	31	track or channel control that silences only that track or channel.
solo	_____	32	durable mic that needs no additional power source.
Trim	_____	33	Another name for gain. Also known as sensitivity.
Pop screen / filter	_____	34	width of a vibration. affects volume. Level.
Parametric	_____	35	Mixer section that groups multiple channels of like instruments or mics to be controlled by 1 fader or knob.
TS	_____	36	type of eq that allows certain parameters, such as frequency to be finely adjusted.
Assign	_____	37	Measure of energy / electrical output or handling capacity.
Ribbon Mic	_____	38	device placed in front of mic to reduce vocal plosives.
Watt	_____	39	Channel strip controll that allows you to place the signal anywhere in the stereo spectrum. like a balance control.
Aux	_____	40	Pre fader listen / level. Allows adjustment of channel gain using VU meter.

**Instructions to the student:** Identify and setup the components of a standard sound reinforcement system consisting of PA speakers, monitor speakers, mixer, amplifier(s), input devices, and associated cables. Using the equipment provided, demonstrate the following skillsII.

**Project: *Basic Sound Reinforcement System***

**PA SYSTEM / SIGNAL FLOW TEST**

- |  |           |
|--|-----------|
| 1) Connect main output (L) to left FOH speaker with appropriate cable.                       | 0 1 2 3 4 |
| 2) Connect in parallel (chain) left FOH to right FOH speaker with appropriate cable.         | 0 1 2 3 4 |
| 3) Connect monitor (aux) output to left floor monitor with appropriate cable.                | 0 1 2 3 4 |
| 4) Connect in parallel (chain) left floor monitor to right floor monitor with correct cable. | 0 1 2 3 4 |
| 5) Make sure all levels are down, then turn mixer on.  | 0 1 2 3 4 |
| 6) Connect dynamic vocal mic to channel 1 with appropriate cable.                            | 0 1 2 3 4 |
| 7) Set gain (trim/preamp) level.   | 0 1 2 3 4 |
| 8) Assign channel 1 to subgroup (submaster) 1.   | 0 1 2 3 4 |
| 9) Assign subgroup 1 to left master (main).  | 0 1 2 3 4 |
| 10) Set fader levels for channel, subgroup and master. <b>Test FOH system*</b> .             | 0 1 2 3 4 |
| 11) Set channel monitor (aux) bus 1 to level 5.  | 0 1 2 3 4 |
| 12) Set master monitor 1 to level 5. <b>Test Monitor system*</b> .                           | 0 1 2 3 4 |
| 13) Connect a condenser mic to channel 9 with appropriate cable.                             | 0 1 2 3 4 |
| 14) Turn on phantom power. Set low cut filter.   | 0 1 2 3 4 |
| 15) Repeat steps 7-12.   | 0 1 2 3 4 |
| 16) Connect keyboard to channel 4 with appropriate cable.                                    | 0 1 2 3 4 |
| 17) Repeat steps 7-12.   | 0 1 2 3 4 |

\*Scoring

\_\_\_\_\_/out of 68

**Unit II Assessments:**

## Introduction to Step Sequencing

Date \_\_\_\_\_

Instructions to the student:

For the first two grades you will use a step sequencer to recreate basic drum and bass patterns. Your teacher will supply you with a packet of common drum patterns (in many styles) as well as a packet of famous bass-lines for you to choose from. You will be expected to recreate them completely and accurately.

For the third grade you will be expected to use a step sequence to organize multiple patterns into standard musical phrase lengths. You will be given a packet describing song form and musical structure. Your project should follow traditional verse/chorus form. For this project you may use the supplied bass-lines and drum patterns from above or you may create your own.

**Project 1: *Beginning Step Sequencing***

	1 Limited	2 Developing	3 Competent	4 Advanced	Not Applicable
Recreation of given drum pattern					
Recreation of given bass pattern					
Combination of patterns in verse/chorus form					

Instructions to the student:

For this project you will use a step sequencer to create a 32 bar music work in song form. The project should include a minimum of drum and bass tracks but now you may add additional parts. Your piece should; demonstrate an appropriate usage of grid structure, provide steady rhythmic patterns, and follow good song form/structure.

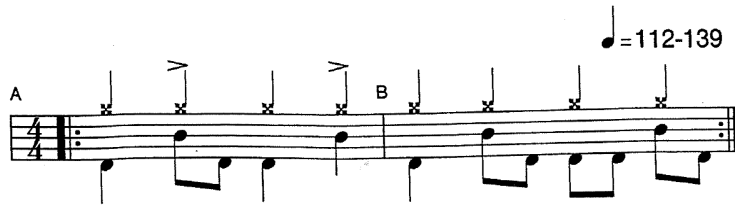
**Project 2: *Song Sequencing***

Song Title \_\_\_\_\_

	1 Limited	2 Developing	3 Competent	4 Advanced	Not Applicable
Use of Grid Structure					
Steady Rhythmic Patterns					
Song Structure/Form					
Bass & Drum Tracks					
Additional Parts					

Comments:
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# Rock 1



## MEASURE A

AC	*
CY	
CH	*
OH	
HT	
MT	
SD	*
RS	
LT	
CPS	
CB	
BD	*

## MEASURE B

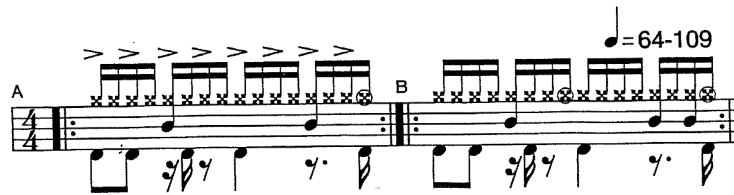
[illegible]

**BREAK**

[illegible]

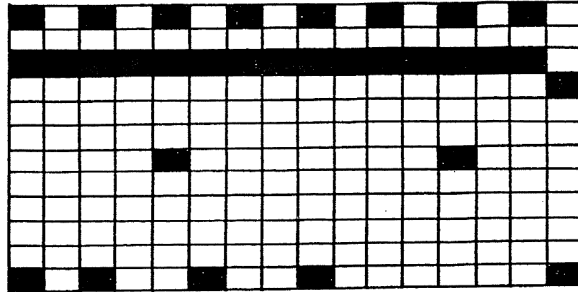


# Rock 2



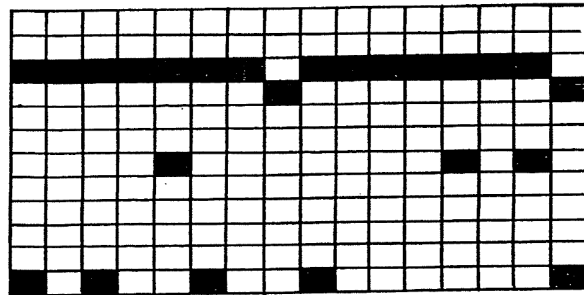
## MEASURE A

AC \*  
CY  
{ CH \*  
OH  
HT  
MT  
SD \*  
RS  
LT  
CPS  
CB  
BD \*



## MEASURE B

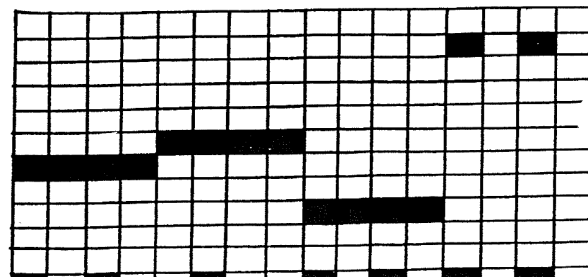
AC  
CY  
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SD \*  
RS  
LT  
CPS  
CB  
BD \*



## BREAK



AC  
CY \*  
{ CH  
OH  
HT  
MT \*  
SD \*  
RS  
LT \*  
CPS  
CB



## Rock 3

The musical notation shows two sections, A and B, in 4/4 time. Section A consists of a four-measure phrase with a melodic line of eighth notes (G4, A4, B4, C5) and a bass line of quarter notes (F3, E2, D2, C2). Section B is an eight-measure phrase with a melodic line of eighth notes (G4, A4, B4, C5, B4, A4, G4, F#4) and a bass line of quarter notes (F3, E2, D2, C2, B1, A1, G1, F#1). A tempo marking of 142-178 is indicated above the staff.

## MEASURE A

[illegible]

## MEASURE B

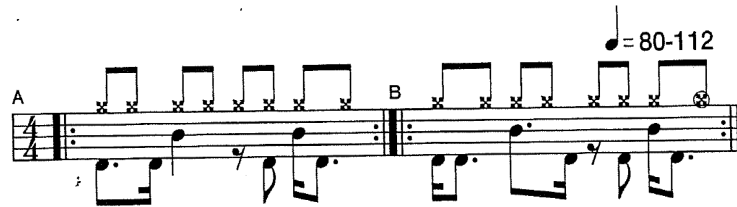
AC																			
CY																			
{ CH *	■		■		■		■		■		■		■		■		■		
OH																			
HT																			
MT																			
SD *					■										■				
RS																			
LT																			
CPS																			
CB																			
BD *	■									■		■							

**BREAK**

The first system of the musical score for 'The Little Boat' is written on a grand staff consisting of two staves. The key signature has one sharp (F#), and the time signature is 4/4. The melody is played on the upper staff, starting with a quarter note G4, followed by a quarter note A4, a quarter note B4, and a quarter note C5. The lower staff provides a bass line, starting with a quarter note G2, followed by a quarter note A2, a quarter note B2, and a quarter note C3. The system ends with a double bar line.

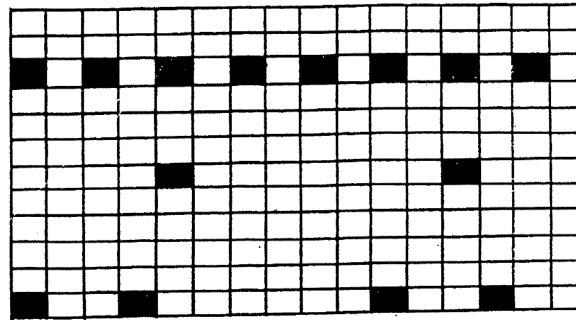
[illegible]

## Funk 1



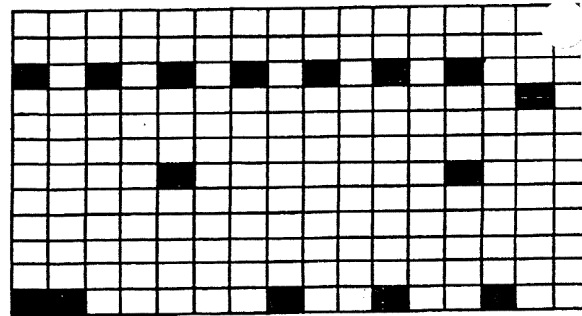
## MEASURE A

AC  
CY  
{ CH \*  
OH  
HT  
MT  
SD \*  
RS  
LT  
CPS  
CB  
BD \*



## MEASURE B

AC	
CY	
{CH	*
{OH	*
HT	
MT	
SD	*
RS	
LT	
CPS	
CB	
BD	*



**BREAK**



AC \*

CY

{ CH \*

OH

HT

MT

SD \*

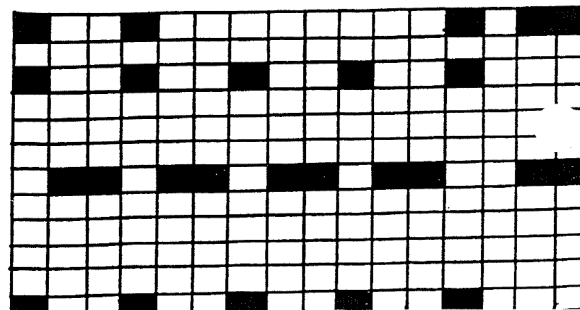
RS

LT

CPS

CB

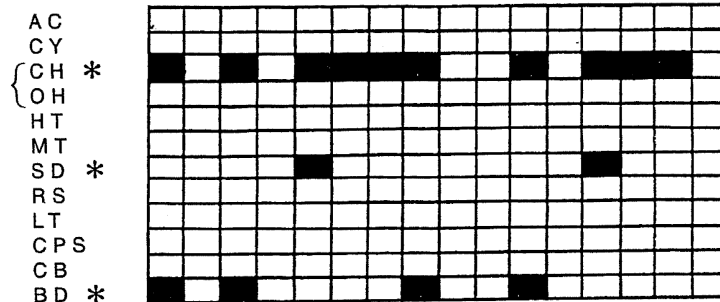
BD \*



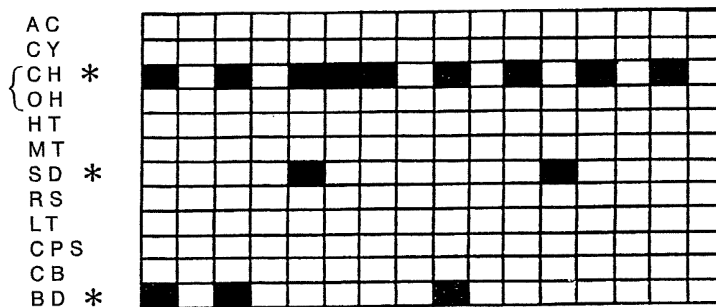
## Funk 4



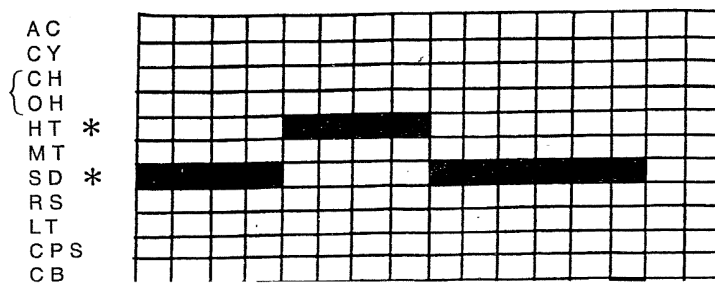
## MEASURE A



## MEASURE B



**BREAK**



# Rhythm & Blues 1



## MEASURE A

	Fraction 1	Fraction 2	Fraction 3	Fraction 4	Fraction 5	Fraction 6	Fraction 7	Fraction 8	Fraction 9	Fraction 10	Fraction 11	Fraction 12	Fraction 13	Fraction 14	Fraction 15	Fraction 16	Fraction 17	Fraction 18	Fraction 19	Fraction 20
AC																				
CY																				
CH *	■		■		■		■		■		■		■		■		■		■	
OH																				
HT																				
MT																				
SD *					■										■				■	
RS																				
LT																				
CPS																				
CB																				
BD *	■		■				■						■							

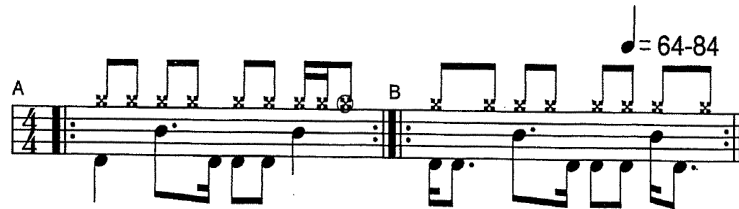
## MEASURE B

[illegible]

**BREAK**

[illegible]

## Ballad 2



## MEASURE A

## MEASURE B

[illegible]

**BREAK**

[illegible]

Music Tech I

NAME(s): \_\_\_\_\_

**Unit III Assessment:**

Introduction to Audio Editing

Date \_\_\_\_\_

Instructions to the student:

You will be given a written script by your teacher. You will record (with your voice) the “text” of the script into an audio editing program. You will then edit/rearrange the audio using various tools available in a digital audio workstation to “rewrite the original script into something new”.

**Project 1: *Dialogue Edit***

	1 Limited	2 Developing	3 Competent	4 Advanced	Not Applicable
Recording of Original script					
Audio Editing					
Assembly					

Comments:

**Project 2: *Audio Loop Edit***

	1 Limited	2 Developing	3 Competent	4 Advanced	Not Applicable
Recording of Original script					
Audio Editing					
Assembly					

Comments:

Music Tech I

NAME(s): \_\_\_\_\_

**Unit III Assessment:**

Introduction to Audio Editing

Date \_\_\_\_\_

Instructions to the student:

Your teacher will instruct you about the radio spot (commercial) including the various components that are traditionally used to produce one. You will then be given the text of an existing radio spot and asked to create your own version. You will be expected to adhere to a very specific time length (given by your teacher) as that is essential to a successful product. In addition to speech, the project will include a sound bed and sound effects. Please utilize the various tools of a digital audio workstation while working on your project. Your work will culminate in a “final mix” of your project submitted as a “stereo audio master”.

**Project 3: Radio Spot**

Commercial Title \_\_\_\_\_

	1 Limited	2 Developing	3 Competent	4 Advanced	Not Applicable
Music Bed					
Quality of Recorded Text/Speech/Voiceovers					
Use of Sound Effects					
<b>Project Submitted as Stereo Master   YES   NO       Project is of correct length   YES   NO</b>					

Comments:



### **Unit III: LOOP EDITING PROJECT 1**

Create loop based composition using DAW.

Use loops to create a composition with varying sections and tempos.

- Use loops found in both C:drive and P:drive
- Minimum 64 measures long. No longer than 3 minutes long.
- Minimum of 10 loop tracks.
- 1 track of mono vocal audio.
- Label all tracks.
- Minimum of 2 tempo changes.
- Place markers for section changes and tempo changes. Label correctly.
- Groove clip loops as needed.
- Change pitch of at least one groove clip in Loop Construction View.
- Set Snap to Grid to Measure.
- When using Copy and Paste, uncheck copy Markers.
- Scoring based on use of loops, adherence to given parameters, creativity, and individual input.
- Partners should alternate jobs at regular intervals.
- Save As regularly in Glyph drive
- Final save
- Name.loop

**Music Tech I**  
**Unit IV Assessment:**

NAME(s): \_\_\_\_\_

Introduction to Audio Production “Cover Song”

Date \_\_\_\_\_

Instructions to the student:

Please use music production software (DAW) to produce a recreation of an existing popular recording; a “cover song”. Your teacher will provide you with the song as well as accompanying information that you may need in order to recreate it. In most cases basic rhythm tracks should be created via midi with all other tracks recorded as audio. The objective is to reproduce the original as closely as possible including the vocals! Your work will culminate in a “final mix” of your project submitted as a “stereo audio master”.

Project: ***Cover Song***

SONG TITLE: \_\_\_\_\_ by: \_\_\_\_\_

Overall Use of Technology	0	1	2	3	4	NA
Use of Midi	0	1	2	3	4	NA
Use of FX	0	1	2	3	4	NA
Use of Audio	0	1	2	3	4	NA
Use of Effects Processing	0	1	2	3	4	NA
Microphone technique	0	1	2	3	4	NA
Quality of Recording	0	1	2	3	4	NA
Track Layout and Labeling	0	1	2	3	4	NA
Engineering	0	1	2	3	4	NA
Production	0	1	2	3	4	NA
Performance	0	1	2	3	4	NA
Musical Score	0	1	2	3	4	NA
Quantity of Sound Cues	0	1	2	3	4	NA
Originality	0	1	2	3	4	NA
Final Mix	0	1	2	3	4	NA
Compare to Professional Recording	0	1	2	3	4	NA

0 = Did not demonstrate skill

1 = Limited

2 = Developing

4 = Competent

5 = Advanced

NA = Not applicable

\_\_\_\_\_ / out of

# **MUSIC TECHNOLOGY**

## **UNIT IV SOUND TO VIDEO**

Name\_\_\_\_\_

- Replace entire existing soundtrack for Nike Commercial using DAW.
- Import video “Nike Commercial”
- Replace existing audio with new:
  - Loops
  - Audio (underscore)
  - Sound effects (sfx)
  - Instrument tracks
  - Midi (convert to audio)
  - Foley
  - Speech
- Label all tracks
- Use Automation
- Master fader / compression
- Delay
- reverb
- Mix in stereo
- Export as Quicktime video
- Save

**MUSIC TECHNOLOGY**  
**FINAL SCORING SHEET**

Name \_\_\_\_\_ Date \_\_\_\_\_

PROJECT TITLE \_\_\_\_\_

SCORING: Least 1 - 5 Best / NA = Not Applicable / P = Present / NP = Not Present

Overall Use of Technology	1	2	3	4	5	NA	P	NP
Use of Midi	1	2	3	4	5	NA	P	NP
Use of FX	1	2	3	4	5	NA	P	NP
Use of Audio	1	2	3	4	5	NA	P	NP
Use of Loops	1	2	3	4	5	NA	P	NP
Use of automation	1	2	3	4	5	NA	P	NP
Use of Foley	1	2	3	4	5	NA	P	NP
Microphone technique	1	2	3	4	5	NA	P	NP
Quality of Recording	1	2	3	4	5	NA	P	NP
Track Layout and Labeling	1	2	3	4	5	NA	P	NP
Production	1	2	3	4	5	NA	P	NP
UnderScore	1	2	3	4	5	NA	P	NP
Quantity of Sound Cues	1	2	3	4	5	NA	P	NP
Originality	1	2	3	4	5	NA	P	NP
Final Mix	1	2	3	4	5	NA	P	NP
Compare to Professional Recording	1	2	3	4	5	NA	P	NP
Sync to Video	1	2	3	4	5	NA	P	NP

**MUSIC TECHNOLOGY**  
**GENERIC PROJECT CHECKLIST & SCORING SHEET**

Name \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Name \_\_\_\_\_

PROJECT TITLE \_\_\_\_\_

SCORING: Least 1 - 4 Best / NA = Not Applicable / P = Present / NP = Not Present

Overall Use of Technology	1	2	3	4	NA	P	NP
Use of Midi	1	2	3	4	NA	P	NP
Use of soft synth (vst)	1	2	3	4	NA	P	NP
Use of Loops	1	2	3	4	NA	P	NP
Use of FX	1	2	3	4	NA	P	NP
Use of Processors	1	2	3	4	NA	P	NP
Mic Technique	1	2	3	4	NA	P	NP
Quality of Recording	1	2	3	4	NA	P	NP
Track Layout and Labeling	1	2	3	4	NA	P	NP
Engineering	1	2	3	4	NA	P	NP
Production	1	2	3	4	NA	P	NP
Similarity to professional radio spot	1	2	3	4	NA	P	NP
Final Mix	1	2	3	4	NA	P	NP

Score \_\_\_\_\_ out of possible \_\_\_\_\_