Unit	1	2	3	4
Performance Objectives	Recommend technical solutions to guide their own students within the Scratch platform	Apply basic music theory concepts to programming objectives.	Program a simple synthesizer and sound generator in Scratch.	Create project-based learning scenarios for students using Scratch
Course Level Objectives	Students will create an online classroom within Scratch, identify object-based programming terms, and locate and utilize programming blocks related to sound and music production.	Students will identify and demonstrate the concepts of pitch, timbre and rhythm. Students will connect the programming blocks: play note, play drum, set instrument to the concepts of pitch, timbre and rhythm.	Students will program complete Scratch applications that generate sound and/or music by chaining coding blocks together to create a synthesizer and/or sound generator.	Students will define the main tenets of Project-Based Learning and their relationship to the Scratch platform, enabling them to plan PBL activities for their students.
Tasks	Students will access and navigate an interactive website. Students will log in to email. Students will create user accounts.	Students will sing a pitch. Students will produce sound on an instrument. Students will clap a rhythm. Students will change numerical values through point-and-click interactions.	Students will locate sound generating and event blocks. Students will combine sound generating and event blocks into a program.	Students will define “role, student-centered, rubric, challenging question”. Students will connect each PBL term with a corresponding aspect of the Scratch Platform.
Prerequisites	Familiarity with web browsers, email systems and sign-in procedures for cloud-based systems.	Ability to vocalize and physically manipulate instruments and physical input devices.	Ability to discern between colors, view labels and drag and drop virtual objects through the use of an input device.	Ability to make abstract connections between pedagogy and programming.