Georgia Performance Standards
Fine Arts

Music Technology Introduction

Students will learn the concepts of music technology, and its use in current music production methods. They will manipulate MIDI protocol, create multi-track compositions using sequencing software, and create song accompaniments. Music Technology students will also compose and arrange songs using notation software, analyze formal elements of music, and learn correct operational techniques for sound reinforcement systems.

GRADES 9 - 12   **BEGINNING MUSIC TECHNOLOGY**

A.   Skills and Techniques/Performance

MHSBMT.1 – Singing, alone and with others, a varied repertoire of music
   a. Sing melodic and rhythmic patterns into an audio software program with technical accuracy.
   b. Demonstrate basic ensemble singing skills with and without accompaniment.

MHSBMT.2 – Performing on instruments, alone and with others, a varied repertoire of music
   a. Develop basic keyboarding finger/hand position technique and correct posture for the MIDI keyboard/controller.
   b. Apply major scale finger patterns in solo performances on the MIDI keyboard/controller.
   c. Perform in small ensembles with one student on a part on electronic instruments.
   d. Demonstrate knowledge of note names on the keyboard.

MHSBMT.3 – Reading and notating music
   a. Demonstrate the ability to read an instrumental or vocal score by describing how the elements of music are used.
   b. Manipulate basic music symbols and terms using music notation software.
   c. Sight-read basic melodies and rhythms on the MIDI keyboard/controller.
   d. Compose music using varied note entry methods (e.g., step-entry, real-time) in music notation software.
   e. Demonstrate basic knowledge of notation software processes.

B.   Creation

MHSBMT.4 – Improvising melodies, variations, and accompaniments
   a. Improvise basic rhythmic and melodic figures over basic chord progressions.
   b. Devise rhythmic and melodic variations of a specific theme.
   c. Create rhythmic and harmonic accompaniments to existing melodic material.

MHSBMT.5 – Composing and arranging music within specified guidelines
    a. Compose music in several distinct styles using music software or sequencer.
    b. Arrange music for small ensembles using a specific instrumentation.
    c. Compare composition techniques used in different software packages.
    d. Create and utilize loop based music data in compositions.
    e. Utilize audio and signal effects such as reverb, chorus, and echo in compositions and arrangements.
    f. Explore basic rhythmic, melodic, and harmonic dictation.

C. Critical Analysis/Investigate

MHSBMT.6 –Listening to, analyzing, and describing music
    a. Demonstrate an extensive knowledge of the technical vocabulary of music.
    b. Identify and explain basic compositional devices and techniques.
    c. Analyze form and harmony of aural and written examples of a varied repertoire of music.

MHSBMT.7 – Evaluating music and music performances
    a. Evaluate performances and compositions by comparing them to exemplary models.
    b. Demonstrate proper knowledge and use of musical vocabulary when evaluating performances and compositions.

D. Cultural and Historical Context

MHSBMT.8 – Understanding relationships between music, the other arts, and disciplines outside the arts
    a. Create music soundtracks for visual arts media.
    b. Compose music influenced by the genre and time periods of other artistic mediums.
    c. Explore multi-media production techniques.

MHSBMT.9 – Understanding music in relation to history and culture
    a. Classify and discuss examples of non-western music.
    b. Analyze and discuss musical time periods and their relationships to cultural and artistic developments.
    c. Classify and discuss selected musical works from known genres of music, their cultural influences, and their significance in history.

E. **Technology Skills and Applications**

MHSBMT.10 – Understanding and describing the major hardware and software components of a computer and their interactions
    a. Identify and define key functional components of a computer.
    b. Understand the terms and units that are used to describe major hardware components.
    c. Describe the interaction between input/output devices and other functional components of a computer in the execution of software applications.
    d. List the steps in setting up a computer and functional components including external and internal audio/MIDI devices.

MHSBMT.11 – Identifying and describing the fundamental devices associated with personal computers
    a. Identify the names, purposes, and characteristics of storage devices.
    b. Identify the names, purposes, and characteristics of motherboards.
    c. Identify the names, purposes, and characteristics of power supplies.
    d. Identify the names, purposes, and characteristics of processor/CPUs.
    e. Identify the names, purposes, and characteristics of memory.
    f. Identify the names, purposes, and characteristics of display devices.
    g. Identify the names, purposes, and characteristics of input devices.
    h. Identify the names, purposes, and characteristics of adapter cards.
    i. Identify the names, purposes, and characteristics of ports and cables.
    j. Identify the names, purposes, and characteristics of cooling systems.

MHSBMT.12 – Exploring careers in music technology
    a. Describe the daily tasks and responsibilities of a professional in the field of music technology.
    b. Compare and contrast the top jobs in music technology.
    c. Explore careers that combine music technology with another field.

MHSBMT.13 – Evaluating, comparing, and contrasting relevant web sites associated with music technology
    a. List the important issues in evaluating web sites.
    b. Identify and critique the layout, navigation, and accessibility of a web site based on its purpose.
    c. Evaluate elements of specific web sites as they relate to music technology.

MHSBMT.14 – Understanding ethical use of technology systems, media, information, and software as it relates to music technology
    a. Identify and explain basic copyright laws as they relate to music technology applications.
    b. Discuss ethical and legal issues as related to music technology.
    c. Discuss copywriting procedures for original compositions or productions.

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MHSBMT.15 - Understanding live audio sound amplification and recording techniques
  a. Demonstrate differences in and uses of microphones in both live and studio applications.
  b. Demonstrate how to store and convert digital audio and MIDI data.
  c. Compare differences between analog and digital sound production and recording.
  d. Compare and contrast various signal processing techniques used to enhance the audio production process.
  e. Utilize music production techniques in a live performance.
  f. Record and edit digital and analog audio.
  g. Demonstrate knowledge of different mediums for audio and their storage requirements.
  h. Demonstrate processes of transferring analog audio into digital audio.
  i. Manipulate data from one program to another converting file formats as needed.

MHSBMT.16 - Understanding music technology in relation to history and culture
  a. Discuss differences in major computer platforms.
  b. Identify major historical contributions to personal computer and music technology.