

MUSIC TECHNOLOGY**INDUSTRY SECTOR:** Arts, Media and Entertainment Sector**PATHWAY:** Performing Arts - Professional Music**CALPADS TITLE:** Introduction to Professional Music**CALPADS CODE:** 7233**HOURS:**

Total	Classroom	Laboratory/CC/CVE
180	180	0

JOB TITLE	O*NET CODE	JOB TITLE	O*NET CODE
Music Directors	27-2041.01	Music Composers and Arrangers	27-2041.04
Sound Engineering Technicians	27-4014.00	Musicians, Instrumental	27-2042.02

COURSE DESCRIPTION:

Music Technology will introduce students to the uses, concepts, techniques, and terminology of computing through music applications. The students will gain experience with current hardware and software for music sequencing, notation, synthesis, and music performance practice. This year-long course is also designed as an introduction to music fundamentals, notation, and theory through music technology such as MIDI and digital recording.

A-G APPROVAL: E**ARTICULATION:** None**DUAL ENROLLMENT:** None**PREREQUISITES:**

Prerequisite
None

METHODS OF INSTRUCTION

- Direct instruction
- Group and individual applied projects
- Multimedia
- Demonstration
- Field trips
- Guest speakers

STUDENT EVALUATION:

- Student projects
- Written work
- Exams
- Observation record of student performance
- Completion of assignment

INDUSTRY CERTIFICATION:

- None

RECOMMENDED TEXTS:

- Alan Parsons' Art and Science of Sound Recording

PROGRAM OF STUDY

Grade	Fall	Spring	Year	Course Type	Course Name
9, 10, 11, 12				Introductory	Music Technology
9, 10, 11, 12				Introductory	Music Technology

I.	INTRODUCTION AND ORIENTATION	CR	Lab/ CC	Standards
	• Demonstrate awareness of course objectives and competencies • Demonstrate an understanding of course requirements and student expectations • Demonstrate awareness of the industry standards and career opportunities	1	0	Academic: RSIT: 11-12.7 CTE Anchor: Career Planning and Management: 3.4 CTE Pathway: B9.1
II.	EAR TRAINING	CR	Lab/ CC	Standards
	• Recognize musical intervals and scales	18	0	Academic: RSIT: 11-12.3 CTE Anchor: Technical Knowledge and Skills: 10.1 CTE Pathway: B2.3
III.	MUSIC NOTATION	CR	Lab/ CC	Standards
	• Demonstrate knowledge of on-staff music • Compose music on the computer • Write melodies, harmonies, and rhythms on staff	20	0	Academic: RSIT: 11-12.3, 11-12.7 WS: 11-12.2, 11-12.5, 11-12.6 CTE Anchor: Communications: 2.4, 2.5 Problem Solving and Critical Thinking: 5.3 Technical Knowledge and Skills: 10.1, 10.3 CTE Pathway: B2.2, B2.3, B5.5
IV.	MUSIC TERMINOLOGY	CR	Lab/ CC	Standards
	• Demonstrate an understanding of music vocabulary	7	0	Academic: LS: 11-12.1 CTE Anchor: Communications: 2.4 CTE Pathway: B2.2, B2.6
V.	MUSIC THEORY	CR	Lab/ CC	Standards

	• Demonstrate an understanding of the theory by writing scales and chords • Write songs with the progression of harmonic sequences	20	0	Academic: LS: 11-12.1 WHSST: 11-12.4 CTE Anchor: Communications: 2.3, 2.5 Problem Solving and Critical Thinking: 5.3 Technical Knowledge and Skills: 10.1, 10.3 CTE Pathway: B5.5
VI.	PIANO TECHNIQUE	CR	Lab/CC	Standards
	• Demonstrate knowledge of keyboard by entering music data into the computer via piano keyboard	10	0	Academic: RLST: 11-12.4 CTE Anchor: Technology: 4.3 Technical Knowledge and Skills: 10.1, 10.3 CTE Pathway: B2.4, B2.3
VII.	INTRODUCTION TO SYNTHESIS	CR	Lab/CC	Standards
	• Demonstrate an understanding of attack, decay, sustain, release, envelop generators, and low-frequency oscillators	15	0	Academic: PS: PS4 CTE Anchor: Technical Knowledge and Skills: 10.1 Demonstration and Application: 11.1 CTE Pathway: B5.4
VIII.	SIGNAL PATH	CR	Lab/CC	Standards
	• Follow the flow of an analog signal from its initial source • Discuss digital signal and flow • Explain the recording and engineering process	5	0	Academic: PS: PS4, PS4.C CTE Anchor: Career Planning and Management: 3.4 Technology: 4.5 Problem Solving and Critical Thinking: 5.3 Technical Knowledge and Skills: 10.1 CTE Pathway: B1.7, B7.3, B8.4, B9.2, B9.4

IX.	SOUND REINFORCEMENT	CR	Lab/ CC	Standards
	• Demonstrate the use of appropriate microphones • Use mixing boards to produce live sound • Participate in running the sound for school productions	15	0	Academic: PS: PS4.C, PS4 CTE Anchor: Problem Solving and Critical Thinking: 5.3 Leadership and Teamwork: 9.3 Technical Knowledge and Skills: 10.2 CTE Pathway: B5.4
X.	MUSICAL INSTRUMENTAL DIGITAL INTERFACE (MIDI)	CR	Lab/ CC	Standards
	• Demonstrate an understanding of Musical Instrumental Digital Interface (MIDI) • Enter music via MIDI into the computer and arrange and edit for production • Demonstrate that the parameters of music can be controlled	20	0	Academic: PS: PS4, PS4.C CTE Anchor: Technology: 4.3, 4.5 Problem Solving and Critical Thinking: 5.2 Technical Knowledge and Skills: 10.1, 10.3 CTE Pathway: B2.6, B5.4, B5.5
XI.	SEQUENCING	CR	Lab/ CC	Standards
	• Uses Cakewalk sequencing software to layer tracks of music into a computer • Record tracks • Produce digital portfolio using a variety of audio formats	25	0	Academic: PS: PS4.C, PS4 CTE Anchor: Technical Knowledge and Skills: 10.1 Demonstration and Application: 11.5 CTE Pathway: B5.4
XII.	LEGAL ASPECTS	CR	Lab/ CC	Standards
	• Understand and discuss copyright laws and legal contracts	2	0	Academic: LS: 11-12.1 RSL: 11-12.1 RSIT: 11-12.4 CTE Anchor: Communications: 2.6 Ethics and Legal Responsibilities: 8.3, 8.4, 8.6, 8.7 CTE Pathway: B7.3

XIII.	EMPLOYMENT LITERACY	CR	Lab/ CC	Standards
	• Identify available positions in the industry through the use of networking or the Internet • Complete an application form correctly • Prepare a written resume • Participate in a simulated employment interview	10	0	Academic: WS: 11-12.2, 11-12.4, 11-12.6, 11-12.8 CTE Anchor: Communications: 2.4, 2.5 Career Planning and Management: 3.1, 3.3, 3.4, 3.8, 3.9 Technology: 4.1 CTE Pathway: B9.1, B9.6
XIV.	PERSONAL SKILLS RELATED TO EMPLOYEMENT	CR	Lab/ CC	Standards
	• Demonstrate promptness and attend class regularly • Develop and maintain acceptable working relations • Demonstrate the ability to manage time wisely • Demonstrate a positive and cooperative attitude • Demonstrate values of honesty and integrity • Demonstrate respect for others • Dress in a professional manner according to industry standards • Demonstrate appropriate personal hygiene/grooming, and dress • Demonstrate responsibility by exerting a high level of effort and working toward a goal	3	0	Academic: LS: 11-12.1 CTE Anchor: Career Planning and Management: 3.1, 3.2, 3.4, 3.8 CTE Pathway: B9.5, B9.6
XV.	INTERPERSONAL SKILLS AND GROUP DYNAMICS	CR	Lab/ CC	Standards
	• Demonstrate the ability to work as a member of a team • Identify proper procedures for handling harassment • Demonstrate leadership skills by working independently, making appropriate decisions, working well with others, and accepting constructive criticism • Demonstrate the ability to accept and work with individuals from various cultures	3	0	Academic: RSL: 11-12.1 RHSS: 11-12.8 WHSST: 11-12.6, 11-12.9 AD : 12.10 US: 11.11 CTE Anchor: Communications: 2.2, 2.6 Responsibility and Flexibility: 7.2, 7.4, 7.7 Leadership and Teamwork: 9.1, 9.3, 9.6, 9.7 CTE Pathway: B6.6, B9.5
XVI.	THINKING AND PROBLEM SOLVING SKILLS	CR	Lab/ CC	Standards
	• Utilize problem-solving techniques • Understand logical reasoning • Demonstrate creative thinking • Discuss decision-making • Demonstrate the ability to interpret information correctly	3	0	Academic: RSIT: 11-12.7 CTE Anchor: Communications: 2.3 Career Planning and Management:

				3.2 Problem Solving and Critical Thinking: 5.1, 5.2 Responsibility and Flexibility: 7.3, 7.4 CTE Pathway: B9.3, B9.1
XVII.	COMMUNICATION SKILLS	CR	Lab/CC	Standards
	• Demonstrate effective verbal and written skills • Read technical journals, and write technical reports using appropriate terminology • Listen attentively, follow directions, and relay directions to others • Demonstrate the ability to research and retrieve information	3	0	Academic: RSIT: 11-12.3, 11-12.7 WS: 11-12.4 CTE Anchor: Communications: 2.1, 2.3, 2.4, 2.5, 2.6 Technology: 4.1, 4.3 CTE Pathway: B2.6