

### I. BASIC DATA

A. Title: Introduction to Music Technology

B. Resume:

In an effort to increase access to music education at WHS, the Music Department proposes to introduce a new course focused on the production and study of music through technologies used in the contemporary music industry. This course would supplement our traditional large ensemble offerings (band, choir, and orchestra) by providing students an option for music study that does not require prior participation in the respective programs at Cider-Mill and Middlebrook School. It is our belief that this course would draw additional students into the formal study of music who are not served by our current offerings. This course would be offered instead of Introduction to Music Theory.

C. Submission Date: 10/7/20

D. Author: Malcolm Karlan

E. Requested Implementation Date: August 2021

#### II. GENERAL BACKGROUND

The music courses currently offered at WHS provide a positive experience for hundreds of students each year. However, participation is limited to students who have previous experience in singing or playing an instrument. This course would provide an additional entry point for students who have an interest in music but lack previous formal training. Over the last two decades, these types of classes and programs have gained prevalence in high schools across the country. Similar programs are already in place in Darien, Westport, Greenwich, and many other schools. This course can be implemented primarily with existing hardware and software that is available in the Mac lab, recording studio, and music department inventory.

#### III. OBJECTIVES

The purpose of this course is to introduce students to modern means of music production using technology. Students will brainstorm, create, reproduce, and edit musical ideas using Digital Audio Workstation software. The concepts of looping, layering, form, style, and genre will be explored as students learn to write their own music. Later, students will learn skills required to mix, master, and produce their compositional ideas into finished tracks.

After completing this course, students will have the skills necessary to continue creating music on their own outside the classroom, using technology which is readily available. More importantly, students will gain a deeper understanding of how contemporary music is created and the structures on which it is built.

While this proposal is for a one-semester introductory-level class only, the course sequence could be expanded further if there is sufficient student interest.

### **IV. SCOPE AND SUBSTANCE**

## **National Core Arts Standards Addressed:**

### **CREATING:**

- MU:Cr1.1.T.HSI Generate melodic, rhythmic, and harmonic ideas for compositions or improvisations using digital tools.
- MU:Cr2.1.T.HSI Select melodic, rhythmic, and harmonic ideas to develop into a larger work using digital tools and resources.
- MU:Cr3.1.T.HSI Drawing on feedback from teachers and peers, develop and implement strategies to improve and refine the technical and expressive aspects of draft compositions and improvisations.
- MU:Cr3.2.T.HSI Share compositions or improvisations that demonstrate a proficient level of musical and technological craftsmanship as well as the use of digital tools and resources in developing and organizing musical ideas.

### **RESPONDING:**

• MU:Re7.2.T.HSI - Explain how knowledge of the structure (repetition, similarities, contrasts), technological aspects, and purpose of the music informs the response.

- MU:Re7.I.T.HSI Cite reasons for choosing music based on the use of the elements of music, digital and electronic aspects, and connections to interest or purpose.
- MU:Re9.1.T.HSI Evaluate music using criteria based on analysis, interpretation, digital and electronic features, and personal interests.

#### **CONNECTING:**

• MU:Cn11.0.T.HSI - Demonstrate *understanding* of relationships between music and the other arts, other disciplines, varied contexts and daily life.

## **Enduring Understandings (drawn from the NCAS)**

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Musicians evaluate and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.
- Musicians' presentation of creative work is the culmination of a process of creation and communication.
- Response to music is informed by analyzing context (social, cultural, and historical) and how creators and performers manipulate the elements of music.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.
- The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria.
- Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.

## **Essential Questions (drawn from the NCAS)**

- How do musicians generate creative ideas?
- How do musicians make creative decisions?
- How do musicians improve the quality of their creative work?
- When is creative work ready to share?
- How does understanding the structure and context of music inform a response?
- How do individuals choose music to experience?
- How do we judge the quality of musical work(s) and performance(s)?
- How do the other arts, other disciplines, contexts and daily life inform creating, performing, and responding to music?

### Units of study:

- Digital audio overview: vocabulary, system components, waveform properties
- Basic sample manipulation: cut, paste, rearrange
- Basic audio effects
- Self-Introduction "Podcast" project
- Loops & Layering
- Orientation to piano keyboard; scale and primary triad pitch collections
- Basic MIDI input
- Remixing / arranging
- Original four-chord song
- Student-designed final project

#### V. METHODS:

This course would be project-based and fully hands-on. For each unit, concepts will be introduced and demonstrated by the instructor. Students will then be asked to explore the new idea or skill on their own using a template. Once a set of skills has been demonstrated and practiced, students will be asked to apply them to their own compositions. A great degree of flexibility is possible with this format, and students will be able to engage with each topic at their own level of experience/understanding. Flexibility is also possible based on interest, as students can demonstrate an understanding of each topic through any genre or mode of musical expression they choose.

The course could be run with as few as 3 students for collaborative projects, but ideally would have 8-16 students enrolled. Class size is limited to 18 based on the number of workstations in the Mac Lab.

#### VI. IMPACT DATA:

## A. Impact on Elementary and Middle School Level:

The impact on elementary and middle school levels would be positive, in that students who do not participate in the traditional ensembles (band, choir, and orchestra) would have another option for accessing music education at the high school. Students taking General Music at the middle school level would have a high school course to look forward to.

## B. Impact on Other Courses/Programs Within the Department:

This proposal has minimal impact on courses within the department, as this offering is intended to appeal to students who are not already involved in our music program. It is hoped that this course generates more interest than our current Introduction to Music Theory class.

### C. Impact on Other Courses/Programs Outside the Department:

This course would be offered in the place of Introduction to Music Theory. While the hope is that the new course would interest a greater number of students than the former offering, the increase should not significantly impact enrollment in other electives since the Mac Lab has limited capacity.

#### D. Impact on Scheduling:

This course cannot be scheduled to conflict with the art department's use of the Mac lab (this is the current practice with AP Music Theory).

### E. Impact on Staffing:

As this course would replace an existing one, there would be no impact on staffing.

### F. Impact on Professional Learning:

While the WHS music staff has a broad understanding of music technology, professional learning time would need to be devoted to investigating this new mode of music instruction. This could take place during the department's existing professional learning time, and would not require additional resources from the district.

## VII. BUDGET:

Α.	Curriculum	Develo	pment:
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1.	Duration of project (in working days):	4 days
2.	Number of different staff members:	1
3.	Estimated total salaries:  a. if during summer @ \$245.76/day  b. if during school year with use of substitutes @ \$100/day	\$983.04 \$400
4.	Supplies:	\$0
5.	Consultant(s):  a. Days  b. Cost per day  c. Total cost	0
TOTAL COST ESTIMATE		\$983.04

Estimated total cost for curriculum development for the next 5 years. \$0

# **B.** Budget for Instructional Resources:

Year 1 (2021-22):

The new course will utilize computers and software already available in the Mac lab, and microphones and recording technology available with the Music Department and the Recording Studio

Possible future expansion:				
	TOTAL COST ESTIMATE:	\$1000		
	MIDI Controllers (10 @ \$100/each)	\$1000		
	Recording Hardware	Already owned by WHS		
	Microphones	Already owned by WHS		
	Garageband software	Already owned by WHS		

\$800

# C. Professional Learning

USB Audio interfaces (5 @ \$160/each)

No additional cost. The introductory course as well as a potential second-level course could be developed using commonly available lessons, templates, and information. Our department could utilize existing annual resources towards the development of this course, including release time for visitations and conferences (typically 4 days a year - October PD day, Election Day conference, CMEA All-State conference) and the existing FAPA budget for consultants and clinicians.

### **VIII. COMPARATIVE DATA:**

- A. Comparable Programs: Almost all contemporary music is now being created using computers. Even music that is created on traditional instruments is recorded, edited, mixed, and mastered on a computer. Music hardware and software can now be considered a musical tool in the same way as a violin or trumpet can. This course aligns with the real-world needs of professional musicians.
- **B.** Review of the Literature: The National Association for Music Education recognizes the importance of music technology in the 21st Century economy, and encourages schools to offer courses in this area. The organization provides research, learning standards, and other resources for this area in the same way it does for traditional ensembles.
- **C. Trends:** Similar courses are currently being offered in Greenwich, Darien, Westport, and other local districts.

### IX. EVALUATION:

## A. Learning Objectives:

Student work will be project-based and teacher feedback will be delivered through narratives and rubric evaluation.

## **B.** Proposal Objectives:

The successful implementation of this course will be evaluated based on student enrollment and student feedback at the end of the term.

## X. SCHEDULE:

Research and development:
Presentation to Teaching and Learning Committee
Formal submission to Board of Education
Implementation of new course
Evaluation

2019-2020 school year October 13, 2020 Fall 2020 2020-2021 school year Spring 2021

## XI. ENDORSEMENTS AND /OR ACKNOWLEDGEMENTS:

With gratitude, I would like to acknowledge that the research for this proposal and the initial draft were completed by previous FAPA Instructional Leader, Nick Loafman.