Pilot Course Proposal

Submitted by: __Garen Freed_____ Building: ___Hazen High School_____

Proposed Course Title: __Digital Sound Production_____

Grade Level: ____9-12_____ Department: ___CTE_____

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PLEASE ATTACH THE FOLLOWING:

Description of course content and how this course will meet current needs not being met by other courses. Description must also include the needs assessment data.

Description of course content:

Digital Sound Production is a CTE course that allows students to solve authentic problems within the world of multimedia while also providing them the necessary training to pursue higher education and/or job opportunities. The three main design requirements for the course were to use research findings about how music is produced in our modern world, to engage with English and Educational Technology standards, and use digital tools to produce and showcase student work. By focusing on real-world problems within multimedia, the students are able to see the impact of their creativity, which has been shown to increase student interest and engagement. They will read books, articles, and stories related to the art and history of music production. Finally, they will create full bodies of digital compositions.

Each trimester of the 2-trimester course will have a different topic within multimedia education for the students to explore while using the knowledge gained from lessons to create their own body of work. This course covers the basics of digital audio recording. Students will explore concepts such as the physics of sound, signal chain, multi-track recording, microphones, and digital effects.

Needs Assessment:

Coming into high school, many students struggle with engaging in their core classes. One common reason students list for their difficulties is the disconnect between what they are learning and their everyday lives. The inclusion of a digital music production into public schools across the United States has demonstrated that marginalized groups of students experienced genuine inclusion in the school community, increased attendance, and the development of job-applicable skills. Buckingham and Sefton-Green make the case that these types of environments are successful because it provides “a non-school, informal learning environment where young people could use the arts to work through issues of identity, build networks of affiliation, and, through the arts, engage in skill development and learning” (Buckingham and Sefton-Green, 1996). Furthermore, digital music production programs “documented increased confidence, digital and print skill levels and, in many cases, pathways to employment, formal education and community development activities” (Buckingham and Sefton-Green, 1996). Additionally, Hull and colleagues argue that these digital music production programs offer new zones of proximal development, master/apprentice relationships where participants can use technology for culturally and socially meaningful activities, rapidly develop technical expertise, and learn though taking on the role of mentoring others…this model has become a widely cited prototype for a range of interventions, in-schools and out-of-schools, and among minority and at risk youth across US systems” (e.g., Nelson, Hull & Smith, 2005).

Upon completion of this course students will be able to meet the following Washington State _____K-12 Learning Standards:

- ***CCSS – ELA***
- *RI.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.*
- *RI.11-12.3 Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.*
- *RI.11-12.7*
- *Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.*
- *RI.11-12.10*
- *By the end of grade 11, read and comprehend literary nonfiction in the grades 11-CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.*
- *By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11-CCR text complexity band independently and proficiently.*

Reading standards for literacy in science and technical subjects

- *RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.*
- *RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.*
- *RST.11-12.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.*
- *RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.*
- *RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.*
- *RST.11-12.10 By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently.*

Educational Technology

- *1.a. Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.*
- *1.c. Students actively seek performance feedback from people, including teachers, and from functionalities embedded in digital tools to improve their learning process, and they select technology to demonstrate their learning in a variety of ways.*
- *2.b. Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.*
- *3.a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits*
- *3.b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.*
- *6.a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.*
- *7.a. Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.*

- ***Arts***
    - Performance Standard (MU:Cr1.1.T.I)-Generate melodic, rhythmic, and harmonic ideas for compositions or improvisations using digital tools.
    - Performance Standard (MU:Cr2.1.T.I)-Select melodic, rhythmic, and harmonic ideas to develop into a larger work using digital tools and resources.
    - Performance Standard (MU:Cr3.1.T.I)-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.
    - Performance Standard (MU:Cr3.2.T.I)-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.
    - Performance Standard (MU:Pr4.2.T.I) -Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.
    - Performance Standard (MU:Pr6.1.T.I) -Using digital tools, demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music.
    - Performance Standard (MU:Re7.1.T.I)-Cite reasons for choosing music based on the use of the elements of music, digital and electronic aspects, and connections to interest or purpose.
    - Performance Standard (MU:Cr2.1.C.I)-Assemble and organize sounds or short musical ideas to create initial expressions of selected experiences, moods, images, or storylines.
    - Performance Standard (MU:Cr3.1.C.I)- Identify, describe, and apply teacher-provided criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.
    - Performance Standard (MU:Cr3.2.C.I) -Share music through the use of notation, performance, or technology, and demonstrate how the elements of music have been employed to realize expressive intent.
    - Performance Standard (MU:Pr4.3.C.I)-Develop interpretations of works based on an understanding of the use of elements of music, style, and mood, explaining how the interpretive choices reflect the creators' intent.
    - Performance Standard (MU:Pr6.1.C.I)-Share live or recorded performances of works (both personal and others'), and explain how the elements of music are used to convey intent.
    - Performance Standard (MU:Re9.1.C.I)-Describe the effectiveness of the technical and expressive aspects of selected music and performances, demonstrating understanding of fundamentals of music theory..
- **Computer Science**
    - 3A-AP-16: Design and iteratively develop computational artifacts for practical intent, personal expression, or to address a societal issue by using events to initiate instructions
    - 3A-IC-27: Use tools and methods for collaboration on a project to increase connectivity of people in different cultures and career fields.
    - 3A-IC-28: Explain the beneficial and harmful effects that intellectual property laws can have on innovation.
- **Science**
    - ETS1 -2: Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.
    - ETS1 -3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.

What are the assessments that will be used to determine student achievement of the goals of this course?

Throughout the duration of the course, students will be assessed in various ways that allow them to get immediate feedback regarding their progress in developing the necessary skills to digitally produce music. Students will be frequently regarding their computer literacy and their ability to interact with programs such as Pro Tools, Logic, Ableton. Assessments will evaluate students ability to record tracks, use MIDI technology to program instruments, use microphones to capture vocal recordings, build effects and EQ chains and properly mix tracks, and upload their work to music streaming services such as Spotify, Soundcloud, and/or Apple Music using services like DistroKid. By keeping a digital portfolio of their work and assessments throughout the course, students will be able to track their progress and continue to advance their skills even beyond their involvement with the course.

Describe how this course will address:

- **Alignment with Common Core State Standards (CCSS) and/or WA State Essential Academic Learning Requirements (EALRs)**
  - This course will be aligned to ELA, Science, Computer Science, Arts, and Educational Technology standards
- **Integration of technology**
  - Students will engage with computer-based music production programs (DAWs), digital plugins, digital music publication services, as well as hardware such as direct inputs, compressors, limiters and equalization
- **Infusion of diversity/multicultural perspectives**
  - Students will be working to connect their unique cultural expression with the ability to produce their own music that celebrates and spreads awareness of their cultural identities
- **Integration with other subject areas**
  - Digital Music Production will cover both ELA and CTE requirements as well as integrating content from Arts and Computer Science/Educational Technology
- **Provision of appropriate experiences for learners of varying abilities**
  - Due to the nature of these projects, each can be adapted to best meet the student's current skill while encouraging them to strive for more.
- **Development of higher level thinking and processing skills abilities**
  - The instructor will present options, but students will pick their project and therefore demonstrate independent thinking, collaborative thinking, independent creation, and collaborative creation in order to use the best possible communication method based on target audience and purpose. All digital production projects will develop and test all levels of thinking, learning, and processing.
- **Articulation of scope and sequences across grades K-12. Will this course replace an existing curriculum? If so, which course?**
  - No, this course will be unique unto itself

  List of proposed units:
  - Music Theory and Musicianship
  - Music History and the History of Music Production
  - Apple Logic Basics/Intermediate
  - Audio Engineering/Sound Recording
  - Pro Tools Basics/Intermediate
  - Ableton Live 11 Basics/Intermediate
  - Effects Chains
  - Sound Mixing
  - The Practice and Legality of Sampling, Interpolation, and Remixing Songs
  - Music and Sound for Film and Television
  - Final Recording/Production Project – Capstone for student work

- **Statement of impact:**
    - Staffing expenses for this course will be covered by CTE while working with the high school to best use existing FTE. CTE will support any additional certifications that are required.

Instructional materials and cost (include titles, names of publishers and copyright).

*****NOTE:** ***Any equipment, supplies, or other costs will be provided by the CTE Department and partnering funders***

- Software
    - ProTools – Avid – $279/education license (the industry standard for sound mixing)
    - Live 11 – Ableton – $279/education license (the industry standard for beat production)
    - Logic – Apple – $199/education license (most user friendly interface for recording instruments)
    - Waves Effects and EQ plugins – Waves Audio – $299/Diamond-Level Bundle/license
    - Guitar and Bass Plugins – Neural DSP - $150-$190/license
- Hardware
    - Volt 276 Direct Inputs – Universal Audio – $199/unit
    - Macintosh Computers – Apple – $500-1000/unit (pending an approved model by CTE)
    - MPK Mini 3 MIDI Controllers – Akai Professional – $120/unit
    - Instrument Cords - $20-30 per unit
    - USB-C Connector Chords - $15-$20/unit
    - Studio Monitors – 5-8 pairs for teacher and student work stations - $300-$400
    - Headphones – a pair for each student - $60-$100

SIGN-OFF FOR PILOT COURSE RECOMMENDATION

	Signature **Date**
1. Department Head (Secondary) **Accepts ☐ Rejects ☐**	_____
2. Principal **Accepts ☐ Rejects ☐**	_____
3. District Content Facilitator **Accepts ☐ Rejects ☐**	_____
4. Curriculum Director **Accepts ☐ Rejects ☐**	_____

Return original to the Director of Curriculum and Instruction. Copies to Principal and Course Originator.