BAA Digital Audio Production 12

District Name: Coquitlam

District Number: SD #43

Developed by: Gord Hembruff, Ingrid Gay

Date Developed: December 2, 2004

School Name: Port Moody Secondary

Principal's Name: Karen Jenson

Board/Authority Approval Date: February 22, 2005

Board/Authority Signature:

Course Name Digital Audio Production

Grade Level of Course: 12

Number of Course Credits: 4

Number of Hours of Instruction: 120

Prerequisite(s):

Special Training, Facilities or Equipment Required:

It is recommended that a teacher has a valid teaching degree in music and has extensive experience with computers and recording hardware and software. The teacher needs to understand the principles behind audio production and the application to all aspects of multimedia production.

Ideally a fully equipped recording studio as well as other audio suites or workstations would be available. Access to computers and video would be essential to the success of this course.

Course Synopsis:
This course is designed to explore all aspects of audio production. As technology grows there is an ever increasing demand in the workplace for skilled and knowledgeable people in the new fields of "multimedia" sound production and post production. This course would be helpful to those interested in Music Technology and Recording, Broadcasting, TV and Film, Animation, Theatre and other audio productions. Topics covered in this course will include: basic and advanced mixing techniques for audio CD, theatre and live performance. Mixing for Movies and video games including 5.1 surround sound. Advanced microphone techniques and knowledge of sound manipulation technology such as reverb, flangers, gates, compressors, mixing boards

etc.Voice overs, synchronization and "Foley" Artistry will be covered as well as arranging and mixing existing music for multimedia and writing original music using the latest technology.

Rationale

The rationale of this course is to build upon the knowledge gained in Recording Arts and Sciences 11. This course is designed to expand this knowledge using the new technology involved with Multimedia. Multimedia here can be defined as the integration of all aspects of sound reproduction with audio CD's, TV, film, video games and internet broadcasting.

Organizational Structure:

Unit/Topic	**Title**	**Time**
Unit 1	Fundamentals of the recording arts	15
Unit 2	Foley and Sound Effects and Voice overs	20
Unit 3	Artistic considerations pertaining to multimedia	25
Unit 4	Integration of Technologies	25
Unit 5	Application of Digital Audio Production	35
	Total Hours	120

Unit/Topic/Module Descriptions:

Unit 1:**Fundamentals of the recording arts** **15 Hours**
Students will review the aspects of recording technology.

Curriculum Organizers: Context - Understanding the structure of Sound
It is expected that students will:

- identify and record how sound is formed and transmitted through concepts learned
- identify and record how sound is manipulated and digitally processed
- identify and record how sound is stored and transmitted

Curriculum Organizers: Application of Technology - Microphone Techniques
It is expected that students will:

- demonstrate a knowledge of different microphone types
- demonstrate a knowledge of pick-up patterns
- demonstrate a knowledge of microphone placement

Curriculum Organizers: Application of Technology - Mixing Techniques
It is expected that students will:

- perform simple cable routing
- perform simple level mix to stereo
- demonstrate knowledge of auxillary hardware and software plug-ins

Unit 2:**Foley and Sound Effects and Voice overs** **20 Hours**
Students will learn the art of foley and other non-musical recording

Curriculum Organizers: Context - The Art of Foley
It is expected that students will:

- understand the definition and meaning of Foley
- demonstrate an understanding of standard Foley practices and equipment
- demonstrate an understanding of the appropriate mixing techniques for this equipment

Curriculum Organizers: Application of Technology - Sound Effects
It is expected that students will:

- demonstrate an understanding of the definition and meaning of sound effects
- demonstrate the ability to acquire sound effects by a variety of means

Curriculum Organizers: Application of Technology - Voice-overs
It is expected that students will:

- compare and contrast different uses of the voice
- compare and contrast various mixing techniques and microphone types

Unit 3:Overview: Artistic considerations pertaining to multimedia 25 Hours
Students will be introduced to the history of sound on film and artistic considerations regarding all aspects of sound in multimedia.

Curriculum Organizers: Context - History of Sound on Film
It is expected that students will:

- demonstrate a knowledge of sound on film beginning with early pioneers from 1880
- demonstrate an understanding of the technological challenges of sound and film synchronization
- demonstrate an understanding of current technologies and trends to the future.

Curriculum Organizers: Application of Technology - Creating the appropriate soundscape
It is expected that students will:

- study current multimedia and identify appropriate mood transitions
- study current multimedia and identify sound imaging and placement
- study current multimedia and recognize and differentiate various foley techniques

Curriculum Organizers: Context - Artistic considerations
It is expected that students will:

- demonstrate an understanding of the nature of real sound versus sound effect
- demonstrate an understanding of the problems in mixing sound ie: real versus over-emphasized
- demonstrate an understanding of the nature of sound affect versus sound effect

Unit 4: Overview: Integration of Technologies **25 Hours**

Students will explore how sound is applied from the recording studio to TV/Film and computer software

Curriculum Organizers: Application of Technology - Synchronization

It is expected that students will:

- demonstrate a knowledge of SMPTE time code
- demonstrate a knowledge of various time code hardware
- demonstrate a knowledge of a variety of frame rates and other video standards

Curriculum Organizers: Application of Technology - Hardware

It is expected that students will:

- demonstrate a knowledge of video and sound hardware
- demonstrate an understanding of how these are connected

Curriculum Organizers: Application of Technology - Software

It is expected that students will:

- demonstrate an understanding of a variety of audio and video software programs
- compare and contrast the pros and cons of different programs and formats

Unit 5: **Application of Digital Audio Production** **35 Hours**
Students will apply skills acquired to create and present an audio project.

Curriculum Organizers: Planning the Project
It is expected that students will:

- create a written outline of their project including timeline, resources, equipment usage and personnel
- develop plans to include how concepts of this course will be covered

Curriculum Organizers: Application of Technology - Creating the Project
It is expected that students will:

- demonstrate an understanding of the production and creation of all aspects of the project

Curriculum Organizers: Application of Technology - Project Presentation
It is expected that students will:

- create a final mix and edit of the project
- arrange and promote presentation
- appraise feedback from peers and instructor

Instructional Component:

- direct instruction
- indirect instruction
- interactive instruction
- demonstration
- group work
- research
- practical application
- analysis of own and other projects

Assessment Component:

- Effective formative assessment via:
    - Clearly articulated and understood learning intentions and success criteria
    - Questions posed by students, peers and teachers to move learning forward
        - Discussions and dialogue
    - Feedback that is timely, clear and involves a plan
    - Students are resources for themselves and others – peer and self-assessment
    - Student ownership

Formative assessment used to adapt learning experiences and inquiry plans on an on-going basis to meet specific learning goals.

Development, awareness and action, based upon metacognition intended to lead to learner independence and self-coaching.

Summative Assessment:

Summative assessments will be determined as students demonstrate proficiency/mastery toward particular learning outcomes. Summative assessments and final grades will reflect the following:

- Students will work collaboratively with the teacher to determine summative achievement on assignments and letter grades based upon dialogue, and evidence of learning
- Behaviour and work habits will NOT be included when determining letter grades
- Marks will not be deducted for late work
- Extra credit and bonus marks will not be awarded
- Plagiarizing will not result in reduced marks/grades –the student will be required to demonstrate their learning authentically
- Attendance will not be considered toward letter grade
- Only individual learning demonstrated –no group marks – will be used to determine grades
- Letter grades will reflect learning towards the learning outcomes articulated above
- Letter grades will be based upon criteria provided/agreed upon toward the learning outcomes

- Letter grades will be determined in relation to the learning outcomes – not in comparison to the achievement of other students
- Poor work will not be assessed towards grades – students will only be assessed on quality work
- Professional judgment and evidence will be used to determine final letter grade in consultation with the student
- Zeros will not be assigned to missed assignments – all required assignments must be completed
- Formative or practice towards learning outcomes will not be included in final grade assessment
- Most recent evidence toward learning outcomes will be used to assign letter grades – learning is not averaged over time

Learning Resources:

Books

	Multitrack Recording for Musicians	Brent Hurtig
	Modern Recording Techniques	David Huber
	Recording farts and other sound effects	Billy Poot
	Creative Recording	Paul White
	Recording Magazine	
	Electronic Musician	
Audio	Audio Lecture Series	David Moulton