Douglas College

A.	Division:	**Education**	Effective Date:		**September 2011**	
B.	Department / Program Area:	**LANGUAGE, LITERATURE AND PERFORMING ARTS / MUSIC**	Revision		New Course	**X**

If Revision, Section(s) Revised:
Date of Previous Revision:
Date of Current Revision:

C:	**MUSC 3181**	**D**: **Sequencing and Synthesis**	**E:** **3**
	Subject & Course No.	Descriptive Title	Semester Credits

F: Calendar Description:

Through lecture/demonstrations and hands-on studio work, students will learn to produce music using sequencers and synthesizers. Emphasis will be placed on understanding the underlying concepts and theory of digital sequencing and synthesis. Using current music software and virtual instruments, students will produce several original works.

G: Allocation of Contact Hours to Type of Instruction / Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

Classroom related

Number of Contact Hours: (per week / semester for each descriptor)

4

Number of Weeks per Semester:

15

H: Course Prerequisites:

Music Technology Certificate program entrance or permission of instructor

I: Course Corequisites:

None

J: Course for which this Course is a Prerequisite

MUSC 3281

K: Maximum Class Size:

16

L: PLEASE INDICATE:

	Non-Credit
	College Credit Non-Transfer
X	College Credit Transfer:

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bctransferguide.ca)

M:	Course Objectives / Learning Outcomes

Through lecture/demonstrations and hands-on studio work, students will learn to produce music using sequencers and synthesizers. Emphasis will be placed on understanding the underlying concepts and theory of digital sequencing and synthesis. Using current sequencing software and virtual instruments, students will produce several original works.

On successful completion of the course students will be able to work unassisted with sequencing software, and will understand and be able to apply the following:

1. MIDI protocol
2. Sequencers
3. Sequencing techniques
4. Introduction to synthesis theory and practice
5. Sampling
6. Multitracking and mixing
7. Alternative controllers
8. Hardware instruments
9. Virtual instruments

N:	Course Content:

1. MIDI protocol, including hexadecimal numbers, MIDI bytes and MIDI messages
2. Sequencers: paradigms and design, including analog, digital and hybrid designs.
3. Sequencing: input, editing, representation
4. Introduction to synthesis theory and practice, including additive, subtractive, FM and wavetable models.
5. Sampling techniques, including recording, editing and layering samples.
6. Multitracking and mixing, using hardware and software sequencers
7. Alternative controllers, including breath, hand and motion-based designs.
8. Hardware instruments: analog and digital sample players and synthesizers
9. Virtual instruments: computer based hybrids combining sampling and synthesis.

O:	Methods of Instruction

The instructor will devote four hours per week to lecture/demonstration. Students will work alongside the instructor in the Technology Lab. Students will be expected to complete regular assignments and projects outside of class time. These can be done in the lab or at home.

P:	Textbooks and Materials to be Purchased by Students

No texts or materials are required. All required hardware and software for the completion of assignments and projects is available in the lab. Students who wish to work outside the lab may want to purchase their own copies of the software used in class. A complete list of recommended software will be available at the first class session.

Q:	Means of Assessment

Tests/Quizzes (minimum of 2):   30%
Midterm Project: 30%
Final Project: 40% *
Total: 100%

*The Final Project constitutes one component of the graduation portfolio requirement

R:	Prior Learning Assessment and Recognition: specify whether course is open for PLAR
	This course is not open for PLAR.

Course Designer(s): Blair Fisher

Education Council / Curriculum Committee Representative

Dean / Director

Registrar