DEPARTMENT OF FINE ARTS

COURSE OUTLINE – FALL 2018

MU1081 (A2): Music Technology I: An Introduction to Music Technology – 3 (2-0-1) 45 Hours for 15 Weeks

INSTRUCTOR:	Shawn Pinchbeck	**PHONE:**	780-539-2783
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OFFICE HOURS:	By appointment		

CALENDAR DESCRIPTION:

This course will be an introduction to current concepts, techniques and tools in use for the creation, recording and production of music with technology. Through both lectures and labs, students will gain theoretical and practical knowledge of acoustics, digital audio theory, psychoacoustics, microphones and recording, computer based recording techniques and software, an introduction to MIDI and virtual instruments, sound synthesis, digital signal processing and associated hardware.

PREREQUISITE(S)/COREQUISITE:

Music Theory Placement Exam (pass), or MU1000, or Royal Conservatory Level 8 Theory, Conservatory Canada Gr.4.

REQUIRED TEXT/RESOURCE MATERIALS:

Text: Modern Recording Techniques 9th edition. Miles David Huber

Students will need stereo headphones with ¼" phono plug adapters. It is recommended that students purchase their own external hard drives for saving projects. Multi-track audio projects can use large amounts of hard drive space, and students then need not worry about projects being accidentally erased.

DELIVERY MODE(S):

Lecture and lab

COURSE OBJECTIVES:

Upon completion of this course, students will understand the nature of sound and hearing, and how computers store and playback sound. They will learn about microphones, mixers and basic recording techniques for musical instruments. Students will have a functional understanding of using Digital Audio Workstation software, such as: Garage Band, ProTools and Reaper. They will learn how to use MIDI and virtual instruments and DSP in DAW software.

LEARNING OUTCOMES:

Students will develop introductory level knowledge of: the theoretical and technical aspects of sound, practical knowledge of recording audio for different purposes, utilizing Digital Audio Workstation software, mixing with DSP plug-ins and making music with virtual MIDI instruments.

TRANSFERABILITY: GMU, UA, UC, AU, AF, CU, KUC, UL*, other

*Warning: Although we strive to make the transferability information in this document up-to-date and accurate, **the student has the final responsibility for ensuring the transferability of this course to Alberta Colleges and Universities**. Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at Alberta Transfer Guide main page http://www.transferalberta.ca or, if you do not want to navigate through few links, at http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2

** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. **Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

Students will complete four assigned projects and an in class exam. The projects are listed below:

a) A project plugging in, placing and recording an instrument with a microphone. (15%)

b) A multi-track recording using virtual instruments mixed and bounced down into an audio file.(20%)

c) Written exam based on topics and practical concepts covered in class. (15%)

d) A 2 min. in duration project requiring MIDI tracks and self-recorded audio tracks bounced down to an audio file. (20%)

e) A Final Project 4 min. in duration project requiring MIDI sequencing and digital recording of real-time audio, the use of digital signal processing and EQ on the sounds. This must be mixed, bounced down and exported as an audio file. (30%)

There may be in class quizzes, as needed.

Further details regarding the project requirements and expectations will be given in class.

GRADING CRITERIA: (The following criteria may be changed to suite the particular course/instructor)

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Project A: September 26

Project B: October 24

Project C: November 14

Project D: December 5

Topics:

September 5th - Introduction to the studio facilities and recording/Audio Basics

September 12th - Audio Basics/Ear and Hearing

September 19th - Microphones

September 26th - Microphone techniques

October 3rd - Mixing Boards, EQ and connectors

October 10th - DAW Software

October 17th - DAW software/Editing

October 24th - DAW software/MIDI

October 31st - Virtual Instruments

November7th - Digital Signal Processing

November 14th - Mixing

November 21st - Audio file formats and delivery formats

November 28th - Careers in Audio

December 5th - Final work

STUDENT RESPONSIBILITIES:

Some class time will be given for course work (projects) but it is up to the student to complete projects in the lab outside of class time.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Calendar at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at https://www.gprc.ab.ca/about/administration/policies

**Note: all Academic and Administrative policies are available on the same page.