



science of sound and hearing, and how computers store and playback audio. They will know how to use microphones, mixers and basic recording techniques for musical instruments. Students will have a basic understanding of using Digital Audio Workstation software, such as: Audacity and Reaper. They will have the introduction to MIDI and virtual instruments, and DSP in DAW software.

### **LEARNING OUTCOMES:**

Students will be able to articulate introductory level theoretical and technical aspects of sound. They will be able to record audio for different purposes, utilizing Digital Audio Workstation software, mixing with DSP plug-ins and making music with virtual MIDI instruments.

### **TRANSFERABILITY:**

Please consult the Alberta Transfer Guide for specific course transfer information. You may check to ensure the transferability of this course at Alberta Transfer Guide's main page <http://www.transferalberta.ca> or use the direct course search at <http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2>

**Students have the final responsibility for ensuring the transferability of courses taken at Alberta Colleges and Universities.**

### **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 or voice with three different types of microphones. (15%)
- b) A multi-track recording mixing multiple sources together and then mixed down to a stereo master. (20%)
- c) Written exam based on topics and practical concepts covered in class. (15%)
- d) A 2-3 min. in duration project requiring MIDI tracks and self-recorded audio tracks bounced down to a stereo audio file. (20%)
- e) A Final Project 3-4 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%)

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

## GRADING CRITERIA:

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 23

Project B: October 21

Project C: November 18

Project D: December 2

### Topics:

September 2 - Introduction to course and recording/Audio Basics

September 9 - Audio Basics/Ear and Hearing

September 16 - Microphones

September 23 - Microphone techniques

September 30 - Mixing Boards, EQ and connectors

October 7 - DAW Software

October 21 - DAW software/Editing

October 28 - DAW software/MIDI

November 4 - Virtual Instruments

November 11 - Digital Signal Processing

November 18 - Mixing

November 25 - Audio file formats and delivery formats

December 2 - Careers in Audio

December 9 - Final work

**STUDENT RESPONSIBILITIES:**

It is up to the student to complete projects 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.