



DEPARTMENT OF FINE ARTS

COURSE OUTLINE – Fall 2019

MU2281 (A2): Music Technology III: Live Sound Reinforcement and Capture 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 focuses on learning how to work with live musicians by capturing and reproducing their performances to the best effect. Students will learn how to record and produce professional quality recordings of student, faculty and visiting artist events at the GPRC. Considerations relating to preamps, microphone selection and placement, live stereo and surround sound techniques, live to two track vs multitrack, dealing with live venue acoustics, audio restoration, mixing and mastering. Students will also learn how to set up and run a sound system for live performances with considerations for microphones, DIs, stage monitoring, amplifiers and speakers, and using signal processing in a live situation. There will be readings and discussion around sound reinforcement theory, the various configurations used in music, multimedia, theatre and more advanced multichannel configurations at use today.

PREREQUISITE(S)/COREQUISITE: MU2081, or permission of the Fine Arts.

REQUIRED TEXT/RESOURCE MATERIALS:

Text: *The Ultimate Live Sound Operator's Handbook* by Bill Gibson

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. (500GB or larger would be ideal)

DELIVERY MODE(S): Lecture and Lab

COURSE OBJECTIVES:

Students will learn how to record live performers in a performance space. They will also learn how to set up a PA for live performers for various situations. They will also become familiar with different types of sound reinforcement requirements and setups for music, theatre, film and multimedia.

LEARNING OUTCOMES:

Students will be able to assess and execute the logistics, equipment and techniques of live sound reinforcement and recording for live performers in various performer and venue configurations.

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 be graded on three major projects and a final exam:

- a) A project requiring the stereo recording of live performers in the recital hall. (15%)
- b) Setting up and running a PA for live performers on-stage. (20%)
- c) Setting up and running a PA with multi-track live performance capture using multiple mic setup. Project is to be mixed and mastered (25%)
- d) Final Exam-Record and master one of the GPRC ensemble year-end concerts (30%)
- e) Students will record concerts and work at events in the Recital Hall and Douglas Cardinal Theatre. They will be required to write a short technical summary of 4 events they took part in. (10%)

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 25th

Project B: October 16th

Project C: November 13th

Project D: December 13th

Topics

Week 1 – Course Introduction

Week 2 – Microphone setups for live capture, Hardware recorders

Week 3- Wiring and connections

Week 4 – Microphone techniques for live sound

Week 5 – PA Equipment – Speakers, Mixers, Wireless, size of room considerations

Week 6 – PA setups – Monitors, Stereo, multichannel

Week 7 – Running a show

Week 8 – Mixing for Live

Week 9 – Mixing for Live

Week 10 – Live recording - Acoustic

Week 11 – Live Recording – Bands

Week 12 – Live Recording – Large groups

Week 13 – Theatrical Sound

Week 14 – Surround Sound Recording

Week 15 – Recording end of term concerts

STUDENT RESPONSIBILITIES:

Booking studio time, and musicians for recording sessions is up to the responsibility of the student.

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