

School of Arts & Science DEPARTMENT OF COMMUNICATION LEAV-125-X01A & LEAV-125-X01B Live Audio Fundamentals Fall 2017

COURSE OUTLINE

Course Description: Students will learn skills in setting up live audio production equipment, and creating an appropriate live mix of sounds. Students will learn how to reproduce sounds of varying frequency and volume using knowledge gained through discussion of wave theory, signal to noise ratios, and other key concepts. The function and placement of microphones and speakers are also explored through hands-on practice. Students will set up, mix and disassemble small productions in a controlled space.

* Please note: the College electronically stores this outline for five (5) years only. It is **strongly recommended** you keep a copy of this outline with your academic records. You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Brian Smith		
(b)	Office Hours:	Mondays 10:30 a.m. to 11:30 a.m.		
(c)	Location:	Y315B		
(d)	Phone:	250-370-3394	Alternative Phone:	
(e)	Email:	smithba@camosun.bc.ca		

2. Intended Learning Outcomes

Upon successful completion of this course a student will be able to:

- a) Describe the main characteristics of a sound wave and apply this knowledge to sound reproduction and recording.
- b) Safely set up and strike a public address system for optimum coverage in a small venue within a limited time frame.
- c) Position, set up, and strike microphones, musical equipment and other input devices and connect them to a public address system within a limited time frame.
- d) Set up, operate, and strike intercom/radio communication systems to maintain contact with other crew members.
- e) Adjust input levels of individual channels as well as the master mix of a public address system at a basic level.
- f) Record mixed audio output of a public address system cleanly and within modulation limits.

3. Course Content

Week	Lecture	LAB	Assignment Due
1	Holiday	Course Outline PA System History LAB *Suggested* Reading: Sec. 1, 2, 3 & 4	
2	Sound Wave Theory and Acoustics * Reading: Sec. 5 & 6	Sound Wave Theory & Acoustics LAB * Reading: Sec. 10 & 11	
3	Microphones and Mixing Consoles	Microphone & Mixing Console LAB Assignment 1 – Sound Waves, Microphones & Mixers	(Next Class)
4	Safety and Workplace Hazards	Test Review / Test 1 (Written) * Reading: Sec. 14	
5	Signal Processors	Signal Processor LAB * Reading: Sec. 12 & 13	
6	Holiday	Power Amplifier and Loudspeaker LAB Assignment 2 – Processors, Amplifiers, and Loud Speakers * Reading: Sec. 15, 16 & 17	(Next Class)
7	Guest Speaker	Multi-pair Snakes, Splitter Boxes, Cabling, and Equipment Testing LAB	(Next Class)
8	Guest Speaker	Real Time Analysis / Equalization LAB Assignment 3 – Signal Flow	
9	Ear Training	Test Review / Test 2 (Written)	
10	PA System (Load-in)	Speaker and Room Equalization LAB Assignment 4 – Ear Training	(End of LAB)
11	Holiday	FOH and MON LAB	
12	Intercom / Communication Systems	FOH, MON and Musical Instruments LAB	
13	Stage Technician Competency Profile	Audio Mixing LAB	
14	Test Review	Test 3 (Practical) Audio Set-up, Operation, Trouble Shooting, and Workplace Safety	

4. Course Schedule

Lecture: Monday 12:30 p.m. to 1:20 p.m.

Lab: Friday 11:30 - 2:20 p.m. (LAB A) and Friday 3:00 - 5:50 (LAB B)

Online: D2L

Out of Class: Up to 4 hours homework per week

5. Course Materials

• Sound Reinforcement Handbook 2nd Edition, Gary Davis and Ralph Jones

Link to free pdf provided on D2L

6. Basis of Student Assessment (Weighting)

a) Three Tests: 40% (Test 1=15%, Test 2=15%, Test 3=10%)

b) Assignments: 40% (Four Assignments 10% each)

c) Attendance and

Participation: 20%

7. Grading System: Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.		1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
1	<i>Incomplete</i> : A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
cw	Compulsory Withdrawal: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

8. Recommended Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning.

This information is available in the College calendar, at Student Services, or the College web site at camosun.ca

STUDENT CONDUCT POLICY

There is a Student Conduct Policy which includes plagiarism.

It is the student's responsibility to become familiar with the content of this policy.

The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.