

### Course Description

An introduction to the fundamental concepts and practices of effective live audio and sound reinforcement, including the science of sound and audio electronics, system components, repair, maintenance, troubleshooting, and mixing live bands in a digital environment. Live Audio 101 & 102 together are intended to equip students to operate and manage audio systems in medium-sized venues with an emphasis on facilitating concerts and similar live events requiring professional sound reinforcement. Live Audio 101 will serve as a prerequisite for 102 and all advanced Audio courses. The course will consist of a weekly lecture (1.5 hours), lab activity (2 hours) and hands-on audio operation during select Gateway events (“practicum.”)

### Instructors

David Sumrall  
817.552.5862

Various Staff and/or Guest Instructors

[david.sumrall@gatewaystaff.com](mailto:david.sumrall@gatewaystaff.com)

### Lectures

Weekly lectures will be delivered by a variety of Gateway professional staff along with occasional guest instructors from the industry. Note taking, reading assignments and class attendance are the responsibility of the student. A minimum of 75% Lecture attendance is required for course credit. There will be quizzes covering material taught in lectures. No homework is given during the semester. The final will be cumulative.

### Labs

Weekly Labs allow students hands-on training via exercises that coincide with each lecture. Course labs will be held immediately following the lecture of your schedule class time. All Lab fees are included in tuition and equipment will be provided. Students are encouraged to bring a music source to Labs - i.e. Phone, iPod, etc. Lab reports are the responsibility of the student, and must be completed and turned in by the beginning of the next lecture to receive credit for the Lab. A minimum of 75% Lab attendance is required for course credit.

### Practicum

Each student will have the opportunity to serve as a member of the audio crew and volunteer to gain hands on experience in real-world audio engineering environments. The exact events assigned will be determined by student experience, availability and willingness to serve. To help students gain as much hands-on experience as possible, we highly encourage volunteering as much as their schedule will allow. Practicums will be supervised by venue staff.

### Grading

The grade for the course will be the Final Exam score averaged with the Lab average score, Quiz average score, and Attendance. This grade will be reflected in the common 4-point scale where A= 90% (4 points,) B= 80% (3 points,) C= 70% (2 points,) D= 60% (1 point.) Any score under 60 is failing. A “C” or higher is required to continue on to Live Audio 102 and advanced courses.

### Textbook

“**The Ultimate Live Sound Operators Manual**” – 2<sup>nd</sup> Edition, 2011, Author – **Bill Gibson**

Students are responsible for obtaining this text before classes begin. Students are also responsible for the required reading prior to the lecture covering that week’s topic.

The book is available from Amazon for about \$27 at the link below:

<https://www.amazon.com/Ultimate-Operators-Handbook-Guides-online/dp/1617805599>

## Class Location and Time

Lecture – TKU room 204, 5:00 pm- 6:30pm

Lab – TKU room 203, 6:30 pm- 8:30pm

## Lecture Schedule

Aug 15	Orientation		
Aug 22	System Overview	David Sumrall	Chapter 1, 2
Aug 29	The Science of Sound	Lee Varian	Chapter 4, 15
Sep 5	Electronics	Lee Varian	Chapter 5, p.15-17
Sep 12	Primary Components	David Sumrall	Chapter 8, 10, p.207-211
Sep 19	Secondary Components	David Sumrall	Chapter 7, 11
Sep 26	Mixing Consoles	David Sumrall	Chapter 12
<b>Oct 3</b>	<b>NO CLASS</b>		<b>NO CLASS</b>
Oct 10	Signal Flow & Gain Structure	David Sumrall	Chapter 12
<b>Oct 24</b>	<b>NO CLASS</b>	<b>seminar week</b>	<b>NO CLASS</b>
Oct 25	Audio Seminar	TBD	AUDIO SEMINAR
Oct 31	Listening Skills	Jason Aulds	Chapter 3, 15, 18, p.1-3, p.20-22
Nov 7	Musical Considerations	Roundtable-Team	Chapter 1, 2, 3
Nov 14	Repair and Maintenance	Brandon Conn	Chapter 5, p.373
<b>Nov 20</b>	<b>NO CLASS</b>	<b>Thanksgiving</b>	<b>NO CLASS</b>
Nov 28	Final Exam Review	David Sumrall	
Dec 5	FINAL EXAM	David Sumrall	

\* Make up days are put in the schedule to allow for class dates to be moved because of Severe Weather, Seminars, and Instructor event schedule changes.