



STARK STATE COLLEGE

GENERAL SYLLABUS

Course Information

Course Name: Live Sound
Course Number: IMT260

Required Materials

Textbook(s): Sound Reinforcement Handbook by Davis & Jones ISBN: 088188-900-8
Required Readings: None
Additional Materials: Notebook for note taking, Pen/Pencil, Flashdrive (minimum 8 gigabytes free for file transfers)

Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Chapter/Topic/Lab
Week 1	<ul style="list-style-type: none"> • Defining a Sound System • Parts of a Sound System & Basic Equipment • Review Analog Mixing Board Basics • Intro to the Digital Board`` • Speakers (subs, woofs, mids, tweets) • Readings: Chs. 1, 10, 11, 13 • LMS: Fundamentals of Live Sound, Guide to Speaker Specs
Week 2	Lecture: <ul style="list-style-type: none"> • Watts and Ohms • Decibels and Equal Loudness Contours • Power Amps (matching Watts and Ohms) Hands On: <ul style="list-style-type: none"> • Setting Up a Basic Sound System • Power On Order (Discuss Power Banks with Different On/Off Orders) Readings: Chs. 3, 4, 12
Week 3	Lecture: <ul style="list-style-type: none"> • Frequency Response • Crossovers • Point Source vs Line Array

Week	Chapter/Topic/Lab
	<ul style="list-style-type: none"> • Inverse Square Law • Quiz Next Week <p>Hands on:</p> <ul style="list-style-type: none"> • Setting Up a Basic Sound System cont. • Setting Live Sound Levels <p>Readings: Chs. 2, 8 Pgs. 43-44, Pgs. 222-227</p> <p>LMS: Setting Live Sound Levels</p>
Week 4	<p>Lecture:</p> <ul style="list-style-type: none"> • Basic "Show Biz" Vocabulary • Running Multiple Mixes from the Same Board (pre/post fader) • Onboard vs. Outboard (inserts) • EQ in Live Sound <p>Hands on:</p> <ul style="list-style-type: none"> • Crossovers (effective use for more headroom) • Signal Processing • Analyze Specs on SSC's Sound System • Speaker/Amp Ohm matching, wattage, etc. <p>Quiz 1</p>
Week 5	<p>Lecture:</p> <ul style="list-style-type: none"> • Review Quiz #1 • Tuning a Sound System • Resonance / Standing Waves / Room Modes <p>Hands on:</p> <ul style="list-style-type: none"> • Including Inserts (GEQ/Crossover Order) • Emphasis on Clean Cable Runs • Effective Use of Gaff Tape • Set Up Monitors <p>Readings: Pgs. 16-17, Pgs. 55-56, Pgs. 254-255</p>
Week 6	<p>Lecture:</p> <ul style="list-style-type: none"> • What is Feedback? • Feedback Control • Eliminating Feedback • Ringing Out a Room (maximum gain before feedback) <p>Hands on:</p> <ul style="list-style-type: none"> • Set Up like Last Week • Tune the Sound System <p>Readings: Ch. 14 Pgs. 47-48, Pgs. 186-188, Pgs. 353-354</p>
Week 7	<p>Lecture:</p> <ul style="list-style-type: none"> • More Effects: Compression/Gates and Stylistic Effects • Final Project Assigned <p>Hands on:</p> <ul style="list-style-type: none"> • Hands-on Midterm <p>Quiz 2</p>
Week 8	<p>Lecture:</p> <ul style="list-style-type: none"> • Review Quiz #2 • Distortion in Sound Systems (Harmonic, Intermodulation) • Gain Staging • Direct Injection (DI) Boxes <p>Hands on:</p> <ul style="list-style-type: none"> • Ringing Out the Room • Applying Compression/Gates

Week	Chapter/Topic/Lab
	<ul style="list-style-type: none"> Mic Up Full Drum Kit Readings: Pgs. 81-86, Pgs. 335-337
Week 9	Lecture: <ul style="list-style-type: none"> Basic Electrical Safety Circuit Planning Causes of Noise (buzz, hiss, crackle, etc) How to Eliminate Noise Quiz Next Week Hands on: <ul style="list-style-type: none"> Create and Fix Distortion Use DI box with guitar and amp Readings: Pgs. 75-80, Ch. 17
Week 10	Lecture: <ul style="list-style-type: none"> Wireless Systems Hands on: <ul style="list-style-type: none"> Properly Gain Stage the Sound System Determine "Circuits" Find the Source of the Noise Don't read the wireless sections of Ch. 10, they seem outdated This Reading Pgs TBD Quiz 3: Weeks 7 - 9
Week11	Lecture: <ul style="list-style-type: none"> Review Quiz #3 Live Streaming Live Sound Hands on: <ul style="list-style-type: none"> Set Up a Wireless System
Week 12	Lecture: <ul style="list-style-type: none"> Dante in Live Sound Quiz Next Week Hands on: <ul style="list-style-type: none"> Mix "live" event in larger space Readings: Ch. 17
Week 13	Lecture: <ul style="list-style-type: none"> The Average FOH Experience Live Sound for Theater/Classical Settings Indoor vs Outdoor Live Sound Hands on: <ul style="list-style-type: none"> Mix a Broadway Show Readings: Chs. 5, 6 Readings on LMS: Quiz 4: Weeks 10 – 12
Week 14-15	Review Quiz #4 Review for Final Exam Bring Final Projects to Class for Review and Submission
Week 16	Comprehensive Final Exam