
Audio Production Course Syllabus

PreProduction

Planning
Budgeting
Scheduling
Studio Musicians
Equipment Rentals

Recording

Concepts

“Then and Now” or “The Way it Should Be vs The Way it Often Is”
aka. “Fix it in the Mix”
Band Recording vs Multitracking
DAWs, Hardware Recorders, Tape and MIDI Sequencers
ProTools Introduction
Audio Tracks, MIDI Tracks, Instrument Tracks, Aux Input and Master Faders
Busses, Inserts and Sends
Basic Rhythm Tracking
Solos, Orchestrations
Tracking Vocals
Playlists and Punch-Ins

Equipment and Procedures

Patchbays and Digital Routers
I/O and Audio Interfaces
Microphones and Microphone Placement
Mono, Stereo, M/S, Multi-Mic
Recording
Acoustic Guitar
Electric Guitar and Bass
Drums and Percussion
Vocals
Strings and Brass
Electronic Instruments
Preamps
Compressors
Mixers and Channel Strips
Other Outboard Gear
MultiEffects, Reverb, Delay

MIDI

- Purpose and Function
- MIDI Tracks, Aux Tracks, Instrument Tracks
- Event Types
 - Note, CC, Modulation, Pitch Bend, SysEx, Other Events
- Event Operations
 - Quantization, Duration, Velocity, Transpose, etc
- MIDI Realtime Properties

Editing

- Playlists and Track Comping,
- Edit Modes
 - Shuffle, Spot, Slip, Grid
- Region Trimming
- Crossfades
- Fixing Pops and Clicks
- Audiosuite Plug-Ins

Mixing

- Concepts
 - Inserts and Sends
 - Busses
 - Auxiliary Input Tracks
 - Master Faders
 - Stems and Submixes
 - Monitoring and Loudness, Bob Katz
 - The Stereo Field and Mono Mixing
 - “A Visual Guide To Mixing”
 - “Sonic Sculpting”
- Processing
 - Tape Modeling, Harmonics and Saturation
 - Equalization (EQ)
 - Frequency, Cut vs Boost, Roger Nichols and the “Whoof Frequency”
 - Dynamics
 - Compression
 - Single Band vs Multiband
 - Limiters
 - De-Essing
 - Side Chaining
 - Time Based Effects
 - Reverb
 - Natural, Analog, Digital, Convolution
 - Delay
 - Natural, Analog, Digital, Hybrid

- Modulation
 - Chorus, Phaser, Flanger , Vibrato, Tremolo, Doppler, Leslie
- Harmonic
 - Tape Modeling
 - Distortion
 - Bit Reduction
 - Exciter
 - Amplifier Modeling and ReAmping
- Sound Field
 - Psychoacoustics, Stereo Manipulators, M/S Processing
- Noise Reduction
 - Archive Restoration and Audio Forensics

Automation

- Automating Track Parameters
 - Volume, Pan, Mute, Volume Trim
- Automating Plug-In Parameters
 - EQ, Compression,
- Copy to Send

Groups

- Edit Groups
- Mix Groups
- Attributes

Memory Locations

- Time Based and General Properties

Synchronization

- Word Clock, SMPTE, MTC

Mastering

Concepts

- Mastering Defined
- Song Sequencing
 - Album Thinking vs Track Thinking
- Song Spacing
 - Allowing Songs to Breathe
- Fades and Crossfades
 - Track IDs and CD Player Muting

Practice

- Gain Analysis and Leveling
- Sequencing and Spacing
- Fades
- Mastering EQ
 - Fletcher Munson and Equal Loudness

Multiband Compression
Limiting
Dither, Sample Rate and Bit Depth
ISRC Codes

Distribution and Promotion

Labels
Self Distribution
CD Baby, Tunecore, iTunes and more