

## 415/515 Lab Assignments

(a list of the sound sources for the labs follows on the next page)

### Lab Assignment 1 - Basic Sound Editing & Pro-Tools 101:

- 1) 1) Splice the attack of one sound onto another sound.
- 2) 2) Reverse a sound to include in number 4.
- 3) 3) Create a long cross-fade between two sounds.
- 4) 4) Mix together three or more sounds to create a single musical gesture.

### Lab Assignment 2 - Time Compression/Expansion & Linear Equalization:

- 1) 1) Alter the pitch and time of a sound by re-sampling - make several copies with different pitch/time changes and mix them together.
- 2) 2) Using a sound created in Lab 1, alter time slightly - make several copies with different time changes and mix them together.
- 3) 3) Using a sound from #1 or 2, dynamically filter using band-pass, band stop, high-pass, or low pass filters (LinEQ Broadband, Auto Band w/ 3 frequencies, 3 Q).
- 4) 4) Radically alter any sound's timbral quality using a para-graphic EQ.

### Lab Assignment 3 - Reverb/Ambience:

- 1) 1) Take one short sound and process it creating at least four different spaces (large, small, resonant, "live" bright, tiny, dark or any combination of these) - one must have a fairly long decay (over 1.5 seconds).
- 2) 2) Remove the source sound (the initial attack) from one of the long-reverb sounds created in #1. Normalize this sound.
- 3) 3) Reverse the sound from #2 and process it using a different long reverb setting (with a different coloration).
- 4) 4) Process a sound that has a long decay (guitar or bell, for example) using an extremely long decay time (at least 5 seconds), attempting to alter the timbre of the source sound as much as possible.

### Lab Assignment 4 - Delay:

- 1) 1) Take a sound created in a previous lab and apply 4 different delay lengths and feedback levels to it (creating 4 new sounds). *Don't use a multi-tap!*
- 2) 2) Mix those four sounds together starting at the same time (you've created a multi-tap delay!).
- 3) 3) Take a long sound created in the reverb lab and create at least four new versions of it using chorus. Experiment with different low frequency oscillators (LFO), voice, and feedback settings.
- 4) 4) Take one of the original sounds (long is best) and place it on two tracks that are panned identically. Experiment with nudging one of the files out of phase with the other in 1 ms increments while listening to what small phase discrepancies do to the overall timbre of the sound (comb filtering). Stop when you begin to hear 2 separate sounds.

### Lab Assignment 5 - Basics of the Studio:

- 1) 1) How to record from the microphone to the Pro-Tools
- 2) 2) How to record from the DAT to Pro-Tools
- 3) 3) How to import CD tracks into Pro-Tools

## Sound Sources - Electronic Music 415/515

Sound 1 - Struck Salad Bowl

Sound 2 - Struck bottle with metal - 3 x

Sound 3 - Scraping metal

Sound 4 - Rattle - 3x

Sound 5 - Crunchy

Sound 6 - High drum w/ beat

Sound 7 - Low whistle w/ raised pitch at the end

Sound 8 - Kalimba

Sound 9 - African rattle

Sound 10 - Struck wood

Sound 11 - Scraped cowbell

Sound 12 - 2-pitched cowbell

Sound 13 - Tambourine

Sound 14 - Over-blown whistle

Sound 15 - Banjo - 2 pitches up

Sound 16 - Banjo - 2 pitches down

Sound 17 - Slap face of banjo, slide on strings

Sound 18 - Woodblock

Sound 19 - Low drum

Sound 20 - Strike and scratch drum face

Sound 21 - Recorder - oscillating pitch A to B-flat

Sound 22 - Recorder - oscillating pitch A to B-flat

Sound 23 - De-tuned 12-string guitar

Sound 24 - De-tuned 12-string guitar - a couple of notes