



A first course in electronic music production

Prof. Russell Hanson, April 2012



Class 4 Outline:

- I. Go over last week's homework
- II. The SuperSaw!!
- III. Progressive House Saw sound in Operator
- IV. Max4Live Plugins
- V. Mastering Mastering
- VI. How to map MIDI controls
- VII. Eternal Accelerando

VIII. Selected producing and DJ tips and advice (from Jester!)

I. Go over last week's homework

- Take your song elements from your song for last week and make it performable in Session View. Make several scenes you can switch through. Make variations between clips for different scenes; don't repeat the same clip or loop too often.

- Make a remix by adding a new drum beat to a song, re-sample the vocal or instrument in the song.
- Drop some samples in the Impulse Drum Machine and use them as part of the performance.

- Make a remix or mashup of a song by adding wobble bass, distorted bass, or bleepy synth or another musical element to the song.

- Make a live mashup setup in Session View.

II. The SuperSaw!!

Create a Progressive House Synth in Ableton Live Using Operator!

http://www.youtube.com/watch?v=zXuUYgOemLs

Sylenth1 is a virtual analog VSTi synthesizer

http://www.lennardigital.com/modules/downloads/

Super Saw In Ableton live AND Instrument Rack

http://www.youtube.com/watch?v=GL5TQIUIpAA

How to: Make a Huge Uplifting Supersaw Trance/House Lead with NI Massive!

http://www.youtube.com/watch?v=Kx_HgIXqvA4

How to: Some Saw Chords (Deadmau5 Style Synth) in NI Massive!

http://www.youtube.com/watch?v=E4-hSPheyNU

III. Progressive House Saw sound in Operator



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Drag Operator onto a midi track with the "Operator-saw D demo.midi" midi notes Tone: 70%, Volume -12 dB Click four squares in lower right, switch to four in a row horizontally, "parallel" Change to 16 Voices and Turn off Retrigger Change Coarse setting for oscillators B = 2, C = 2 Change Fine B = 15, C = 10, D = 5 Change all Wave(form) to "Saw D" Change Release for all oscillators to 1.62 s and also turn Retrigger OFF Enable filter, change to Low SVF, and Freq to 1.96 kHz, Resonance to 0.60, Decay down a little to 531ms Change Spread to 85% To make more choppy effect increase Envelope effect from 0%-60%

IV. Max4Live Plugins

http://www.maxforlive.com/library/device/563/8byte

"An aliasing friendly '8bit' synth. Pick from four waveform types and a slider control for aliasing that waveform. Built in two-note arpeggio and pitch LFO"

EnvelopeShaper

EnvelopeShaper	-	Like 🕈	Share	More info
EnvelopeShaper Subtle Sonic Attack Decay Atk Time Lag Hold Curve			4- 1000000	
Thresh: Min 0.0 dB Rng 1.0 dB	Delay 13.3 ms	Input [Output G	ain

- Download v. 1.0 for Max for Live.
- <u>Download Max version.</u>

http://www.maxforlive.com/library/device/1126/subtlesonic-envelopeshaper EnvelopeShaper processes the sounds by boosting or cutting the attack or decay. It does this by comparing the difference between two volume levels, one fast and one slow. You can use it to extend the sustain of a sound, or soften the attack, or do the opposite.

EnvelopeShaper Demo Video

http://www.youtube.com/watch?&v=YPyXnjNlzT8

OVERTHROW SOUND! A first course in electronic music production

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The Yohng Waves L1 Limiter Plug-In

http://www.yohng.com/software/w1limit.html

Install to /Library/Audio/Plug-Ins/Components/ (Mac) "W1 Limiter is a clone of Waves L1, with identical output. This was accomplished without reverse engineering Waves products, and the result was obtained by adjusting 4Front YLimiter, by doing the following: Simplifying release curve Increasing release time 3 times altering softening circuit filter"

Glitch VST demo video

http://www.youtube.com/watch?v=wCgENwOytuA

Fun with Effectrix http://www.youtube.com/watch?v=vtYCTp_MTv0

Cueing & Crossfading in Ableton Live

http://www.soundonsound.com/sos/sep07/articles/livetech_0907.htm

Auto BPM wobbles in Massive, etc.

Manual LFO/BPM Syncing http://www.lelotusbleu.fr/catalog/download/LFO%20HERZ%20Table%20English.PDF

Electro and Dubstep Presets in Reason:

http://www.propellerheads.se/download/ Some nice presets/refills for Reason: http://soundcloud.com/luckydaterefills

osc	KTR OSC	KTR FLT	VOICING	ROUTING	GLOBAL	
1Env 🕂	2 Env 🔶	3 En v 🕂	4Env 🕂	5LF0 🝕	• 6 L F O	Φ
Init Patch						
Global tune Random 0.00 Paramet	Randomiz	e All 🗖	osc	Filter	Insert FX	M
	Paramete	r 🗖	% 30	% 30	%	%
Preset BPM	Mod Depti	h 🗖				
120.00 Connection Reset Type Sel Extern Sync Matrix	ns 🗖	Random 🔲	Random 🔳	Random 🔳	Ra	
	Matrix		Keep OSC Pit	ch		

V. Mastering Mastering

http://www.propellerheads.se/substance/discoveringreason/index.cfm?article=part3&fuseaction=get_article

Template Reason song with the multiband master compressor setup

http://www.propellerheads.se/substance/discovering-reason/files/part3/multiband.rns

Mastering

iZotope Ozone 5 Complete Mastering System



Professional sound limiter.

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www.izotope.com/ozone5/

"iZotope's complete mastering system in a single integrated plug-in includes eight essential mastering tools and meters: Maximizer, Equalizer, Dynamics, Stereo" http://izotope.fileburst.com/guides/Mastering_With_Ozone.pdf

VI. How to map MIDI controls to a VST instrument

1) Make a Massive Synth.

2) Right click and Group (\mathbb{H} -G) makes an instrument rack.

3) Show the Massive parameters by hitting "Unfold Device Parameters", small triangle in upper left.

4) If the parameter you want to control is not present, scroll right and press "Configure". Parameters you want to control will be added if you click or adjust them in the Massive window.

5) In instrument rack, map Massive parameters to Macros using "Map Mode". Enable "Map Mode",

then click the parameter you want to control, then the "Map" button on the macro control.

6) Finally, to map the macro to a knob, enable MIDI Mappings, select the macro you want to control and turn the knob on the controller.



On-screen and computer keyboard MIDI keyboard for Reason – MidiKeys

http://www.manyetas.com/creed/midikeys.html

VII. Eternal Accelerando (from CJ Carr!)

1) Drop a kick drum onto an audio track, drag the length of the drum so it lasts 4 beats.

2) Copy and paste or duplicate the drum, or drag it to extend it for 25 bars, then duplicate the whole track into another audio track below.

3) In the Sample Editor, double the tempo by hitting "*2". Repeat steps 2) and 3) until you have four tracks of increasingly slow sample tempos.

4) Draw in the volume automation lines as Track 1) decreasing from 0dB to –inf dB, Track 2) decreasing to -45dB, Track 3) increasing from -10dB to +3dB, Track 4) increasing from –inf dB to 0 dB.

5) Have the Master's mixer Song Tempo automate from 100-200 BPM. Reverse for ritardando.

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VIII. Selected producing and DJ tips and advice (from Jester!) Default and template projects

They save immense amounts of time. An improv template (for live jams and working with other live musicians), a composition template, and a DJ template.

Iterations v0.1

Saving of updated compositions with different version names (e.g., SongName v1.2). Sometimes you derail so far you wish to go back, if you don't do this it can be difficult if not impossible to do so.

Listen to your tracks on other sound systems & pay attention to the speakers you are mixing on

Your iPod, in the car, a friend's speakers, etc. It will also encourage you to take a break. Your ears do get tired, and things will sound very different after a day away from your work.

Keep the volume low when you produce

Many tracks and noises sound awesome loud. Not as many sound so good with the volume low. If you like something with the volume quiet, it will sound incredible loud. This also prolongs how long you can work on your tracks before ear fatigue.

If you are DJ-ing

Get off the mouse, use shortcuts (or your controller). You have much more stage presence when you are not fiddling with your mouse/touchpad. This means you need to practice not using the mouse when you are practicing.

Practice

You are only as good as how often you work at something. Seriously. It supposedly takes 10,000 hours to master something. That sounds like a lot if you only practice 1 hour a week (192 years of work). But at 40 hours a week its under 5 years. Find your balance. I've seen people get really good in months. Computers multiply the awesome, but there is still work to do. People and audiences especially appreciate fluidity in music, you need to practice to become fluid at what you do.

Control-z/ಱ-z (Undo)

Don't be afraid, you can always undo.

Less is more (subtraction can be more powerful than addition)

It's better to cut other track volumes than raising the channel you want louder. The same holds true for EQ. Lower the opposite bands of what you wish you hear more of.