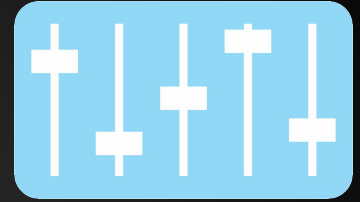# Project #8
Mixing 101

Intro Video: [Stan Freberg - "Banana Boat Song"](#)

Preliminary Questions:

1. What is a multitrack recording session?
2. What are some of the various things to consider when mixing a multitrack session?

Overview:

You have just been made a recording engineer and your first gig is to mix a session for the new band just assigned to the C. Milton Wright Music label.

Project Objectives:

1. Choose a raw session and import tracks into Pro Tools.
2. Appropriately pan and balance each track.
3. Add EQ and compression to each track.
4. Add reverb and other modulation effects where appropriate.
5. Add an entry to your online portfolio.
6. Write a project reflection.

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage

Stage #1:
Pre Production

Stage 1: Pre-Production

Choose a song from the Raw Tracks Download Library

Objectives:

Students will correctly save two versions of their project - RAW and MIXED

Directions:

1. Open a new blank Pro Tools session and save as "Project #8" in your projects folder.
2. Select one of the full multitracks, not edited excerpt
3. Download your audio tracks and import them into your session.
4. Save as "Project #8 - RAW session"
5. Save as "Project #8 - MIXED session"
6. You will continue working with the MIXED session file

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage

Project #6
Mixing 101

Stage 2: Tracking

Organize your multitrack session.

Objectives:

Students will organize their multitrack session to facilitate work flow.

Tips:

- Order your tracks by instrument (score order)

    Ex: vocals, winds/brass, piano/synth, guitar, bass, drums

- Color tracks of similar instruments
- Group tracks

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage

Pro Tools Project #3
Mixing 101

Mixing 101

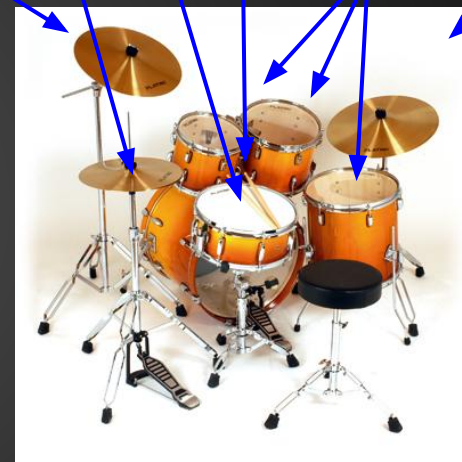## Stage 3: Mixing

Balance/Pan your tracks.

Objectives:

Students will use mix window faders to balance their tracks
and panning knobs to achieve a 3D stereo image.

Tips for panning:

- **Main vocal - center**
- **Bass - center**
- **Drums**
  - **Kick center**
  - **Snare slightly left**
  - **Hi hat slightly further left**
  - **over heads -all the way left/right**

Overhead L   HH   Snare   Kick   -----Toms----   Overhead R
100   0   100

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage

Pro Tools Project #3
Mixing 101

Stage 3: Mixing (cont.)

Students will apply proper Digital Signal Processing (DSP) to their project.

Frequency (EQ) > *Amplitude* (Compression) > *Timing* (Reverb)

Objectives:

Students will determine how to appropriately add EQ, Compression, and Reverb and other modulation effects.

Directions:

- Apply Digital Signal Processing (DSP) Frequency>Amplitude>Timing
- To copy an insert, press "alt" then click and drag to another track

Tips for adding effects:

1. Solo your track
2. Loop playback on a region
3. Start with the presets and work from there
4. Hit the bypass button and see if you improved the track

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage

Pro Tools Project #3
Mixing 101

Stage 3: Mixing (cont.)

Things to consider when EQ'ing:

1. Use the EQ3 7-Band insert.
2. After EQ'ing all tracks, check that you have an even distribution of boosted frequencies between all tracks. If it sounds muddy or cluttered, try cutting some frequencies.

Things to consider when adding compression:

1. Use the Dyn3 Compressor/Limiter insert.
2. Start with a 3:1 ratio and the threshold all the way up.
3. Gradually pull down the threshold until the compressor start to take effect.
4. Use make up gain to regain volume.
5. Distorted electric guitars don't need compression.

Things to consider when adding reverb:

1. Use the D-Verb insert.
2. Don't overdo it. Use a mix of wet/dry signal.
3. Apply to vocal tracks and others as you see fit.
4. Bass/Drums don't really need it.

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage

Pro Tools Project #3
Mixing 101

Stage 4: Mastering

Add a master fader.

Objectives:

Students will apply light compression to the master fader track to prepare for final mixdown.

Tips:

1. Add a new stereo track and select master fader.
2. Use a low ratio (2:1 - 3:1).
3. Begin with threshold all the way up and gradually bring it down.
4. Use make up gain to bring volume back up.

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage

Pro Tools Project #3
Mixing 101

Stage 5: Post-Production

Objectives:

Students will save their final mix as an .mp3 file to their project folder.

SWBAT reflect on their project and determine where they were successful and where they can improve.

SWBAT add an entry to their online portfolio that is worthy of public presentation.

Directions:

1. Bounce both your RAW and MIXED versions to disc.
2. Choose these settings:
   a. Select file type: .wav and check box - add .mp3
   b. Select format: Interleaved
   c. Select bit depth: 16bit
   d. Select sample rate: 44.1
   e. Save to your bounced files folder

Classroom Expectations:
- Be on time
- Be prepared
- No gum, food, or beverage