

Make Your Own Beats  
Linux MultiMedia Studio

Lesson Plan

A student with no prior knowledge of digital audio workstations (DAWs) learns to compose simple beats and songs using the free Linux MultiMedia Studio (LMMS) software.

Lesson Objectives

At the end of the class, the student will:

* Know how to download and launch LMMS.
* Be able compose a beat and melody.
* Be able save and export projects for future access.
* Know where to find additional resources.

Lesson Prep Work

(30 min, at a minimum, prior to student arrival)

* Get in early to test for technology failure, because it will happen :-)
* Plug-in and test headphones.
* Load example song.

Lesson Prerequisites

* Basic computer skills, notably using the keyboard and mouse.

Lesson Outline

The lesson is completed in one (90) minute class session.

**(5 minutes)** *Introduction*

* Introduce instructor, students.
  + Ask students at introduction: what do you want to record?
* Let students know it’s okay to take phone calls, but ask them to put their phone on vibrate and answer calls outside the classroom.
* Inform students that they can sit back and watch if the class is too advanced.
* Inform students they can go to the bathroom, they don’t need permission.
* Show order in which class will happen. Explain scope of class.

(80) *Activities*

* (15) Getting Started
  + What is LMMS?
    - *Definition:* LMMS is a free cross-platform software that allows you to produce music with your computer. This includes creating melodies and beats, synthesizing and mixing sounds, and arranging samples. You can have fun with your MIDI keyboard and much more, all in a user-friendly and modern interface. LMMS also comes with many ready-to-use instrument and effect plugins, presets, and samples*.*
      * Key Concept: DAW (Digital Audio Workstation)
  + Download and Launch:
    - * LMMS must be downloaded and installed to work.
      * *Open:* My Computer > (J:) Lab > Make a beat
  + Introducing the Interface
    - Song Editor
      * Compose melodies using ready-to-use instrument and effect plugins via the piano roll.
    - Beat & Bassline Editor
      * Create your beat loop.
    - FX-Mixer
      * Add effects to your sounds (not covered in this class).
    - Controller Rack
      * (not covered in this class).
    - Side Bar
      * To access instruments, beats, plugins, and your past projects (details in Beat & Bassline Editor section).
* (30) Make a Beat!
  + Beat & Bassline Editor
    - This is your work space for beats and looping instruments.
    - *Demo:* Maximizing the window
      * Open/close editing windows
    - Time Signature
    - Tempo
    - 1 measure in length (briefly explain 4/4 beat)
  + Getting Beats (and instruments)! My Samples
    - Side Bar (point out details on handout)
      * Instruments
      * Projects
      * Samples (basses, drums, etc.)
      * Presets (saved settings for instruments)
      * My home documents (My Documents, etc.)
      * My computer (your drives)
    - My Samples - Folders (notably “drums”)
    - Choose percussion/instrument
      * Click and hold for sample.
      * Double-click or drag and drop to add to editor.
      * Click on a step to add a beat; click again to remove.
    - Start and stop (Play and Pause button)
    - Volume and pan
    - *Activity:* 10-15 minutes to create a beat
      * *Tip:* Point out *“*Tips for making a good beat” (last page of handout).
* (30) Make a Melody! The Song Editor
  + Song Editor is where you create melodies and arrange patterns and samples into actual songs.
  + Notice that Beat and Bassline is already there:
    - Drag measures to extend loop created in the Beat and Bassline editor.
    - Each pattern bar = 1 measure.
  + Instrument Plugins & My Samples
    - Drag an instrument and drop into the Song Editor.
    - Double-click on the pattern bar to open the Piano Roll:
      * Click on the grid to add a note (when you click, it will play a sample).
      * Click in the middle of the note and drag to move it up/down, left/right.
      * Click on the end of the note and drag to make it shorter or longer.
      * Use the note volume handle (below the note at the bottom of the editor) to adjust the volume.
      * Demo your melody by using the play/pause button in the Piano Roll.
      * Use the X to close the piano roll and return to your song.
    - Drag additional instruments and/or add beats (+ button in the song editor) to fill out your song.
    - Clone or remove tracks by clicking on the wrench button.
    - *Activity:* 10-15 minutes to create melodies/songs.
* (5)Saving and Exporting
  + Save/Save As to save your project (.mmpz file).
  + Export—when a song is finished—to be able to play in a media player, like iTunes.
    - .wav = BIG file.
      * CD quality. Plays in music players like iTunes, WinMedia, etc.
    - .ogg = compressed file.
      * Good for transferring and file sharing. Plays in some media players.

(5) *Conclusion*

* Any questions?
* *Reminder:* “Tips for making a good beat” on handout.
* Additional resources (listed on the last page of the handout):
  + LMMS site:
    - <http://lmms.sourceforge.net>
    - Wiki: On LMMS site, click on Documentation. Wiki contains instructions, resources, and info, including additional instrument plugins.
  + YouTube (search term: “LMMS tutorial”)
  + CTC resources (ask questions at the desk, schedule a 1:1 appointment, etc.)
* Remind students to take the class survey!

What This Lesson Does Not Cover

* FX-Mixer and Controller Rack functions.
* Actual music composition theory.